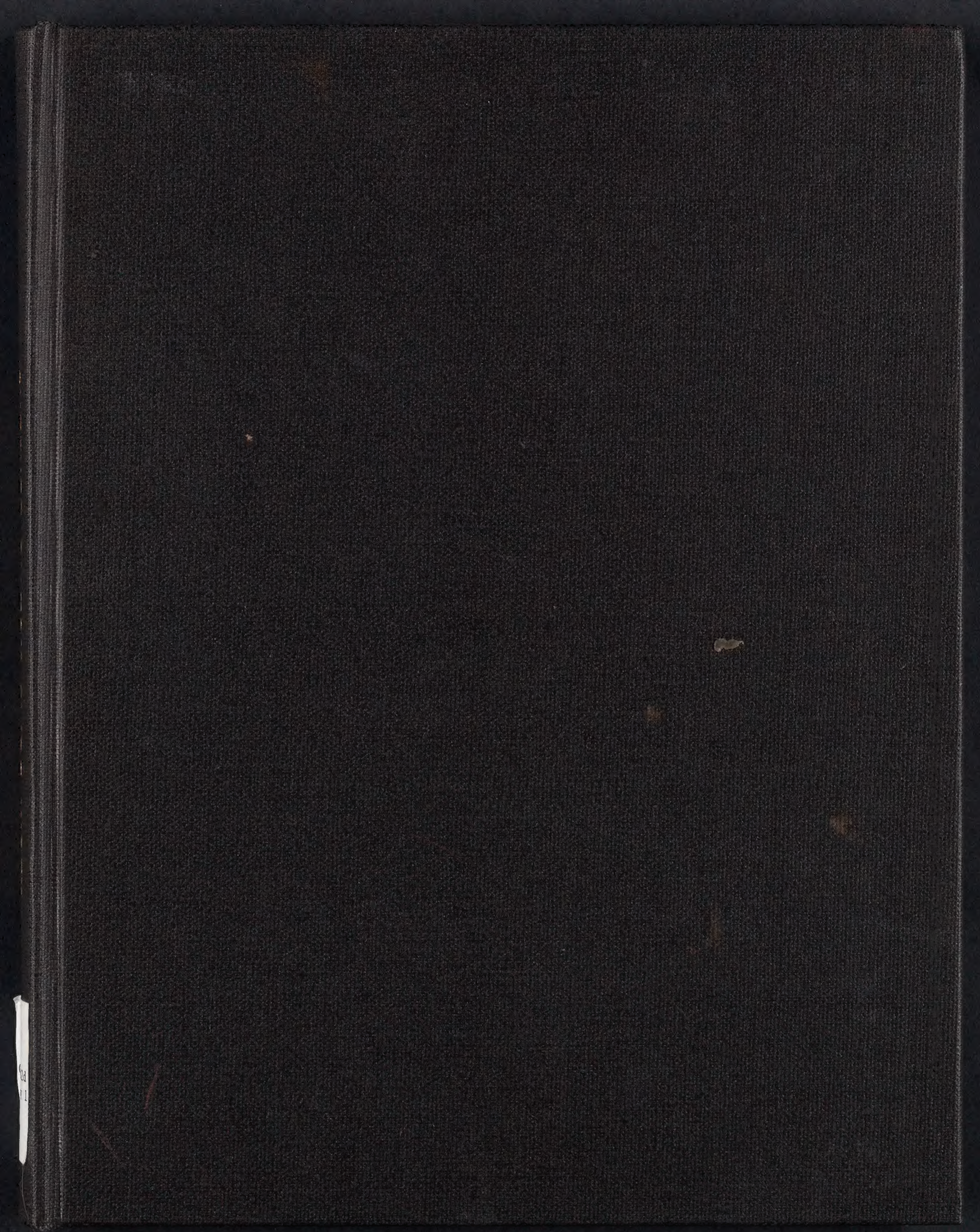




C 5152 d c.1

Harvard University



FARLOW
REFERENCE LIBRARY
OF
CRYPTOGAMIC BOTANY





Introduction

I

III

1

45

CHEEVER DIATOM SLIDE INDEX

FARLOW REFERENCE LIBRARY

53774

AUG 20 1975

7897
31-2

Clarence A. Cheever MD (1858-1947) a successful Milton, Massachusetts physician and amateur botanist built up in his life time one of the most complete diatom collections in the Western Hemisphere. Dr. Cheever first developed his interest in diatoms as an undergraduate student of Dr. W.G. Farlow, at the Bussey Institute of Harvard University. Though he later chose to go on to medical school and became a practicing physician, Dr. Cheever never lost interest in botany. In fact for many years he was the editor of *The New England Farmer*.

Interestingly enough the study of diatoms always remained a hobby to Dr. Cheever, despite the fact that he was continually adding to his collection and keeping abreast of the scientific literature on the subject. Although he had obviously become well qualified he never published a single work on the subject of diatoms.

The bulk of Cheever's Diatom Herbarium consists of over 10,000 prepared slides, representing a world wide gathering of thousands of species and over two hundred freshwater and marine diatom genera. Acquired mainly through purchases, there are dozens of collectors and authors, both prominent and obscure, represented in Dr. Cheever's collection. Among these are:

F. Habirshaw, H. van Heurch, Wm. H. Pratt, H.H. Chase, D.B. Ward, H.L. Smith, Wm. A. Terry, J.D. Moller, P.F. Cleve, G.A. Fisher, C. Febiger, Wm. A. Poyser, Tempere DeBrebisson, T. Eulerstein, F.F. Forbes, P. Klavsen, C.L. Peticolas, C.H. Kain, O. Kendall Jr., R.P. Durkee, E. Thum, G. W. Morehouse, J.P. Wintringham, T. Chalkley Palmer, J.R. Bartholomew, J.L. Cloud, H. Reichett and W.C. Walker, M.A. Booth, H.S. Lauder, L. Leger, A. Newman, A.C. Wheeler, R.S. Warren, F.W. Lewis, C. Stodder, M.A. Grunow, E. Samuels, J.W. Bailey, J.D. King, N.A. Mason, L. Woolman, F.S. Morton, E. Weissflog, C. Bourgonne, W.H. Harvey, J. Pain.

In addition to the slides the Herbarium also includes 500 vials each of W. A. Terry's and F. Habirshaw's cleaned and dried diatoms; a copy of Schmit's *Atlas der Diatomacee* through plate 336; an extensive card index to species, collection localities and diatom literature and several of Dr. Cheever's note books.

The Cheever Diatom Herbarium was received in part as gifts in 1941 and 1943 from Dr. Cheever himself. The remainder of the collection was later donated by his son Austin Cheever in 1953.

The restoration organization and indexing of the Cheever Diatom slide Herbarium was begun in June 1974 and completed February 1975. The restoration and organization of the collection was carried out by Shirley Mah, Dan Plas, Ann Faulkner and Jerry Cacavio. The index was prepared by Ann Faulkner and Jerry Cacavio and typed by Alice Panossian.

In organizing Dr. Cheever's collection it was decided that the slides be divided into four groups, sections A, B, C and D. Into Section A were placed all those slides which bore determinations. Into Section B was placed all those slides which were undetermined, but which bore collection localities. Also included in Section B was a number of slides, which turned up after the major reorganization had taken place and which are treated in the adenda. Section C was catch all for those slides which were not identified and which bore no collection localities. Section D was set up to contain the following three diatom exsiccati: *Diatomacearum species typicae* (no. 1-700); Cleve and Moller's Diatoms (no. 1-300); and Synopsis Des Diatomees de Belgique (no. 1-550).

Section A Boxes A-1 to A-41

Determined slides are indexed alphabetically according to genus and then according to species. The actual location of the slides are given by letter number combinations located on the extreme right handside of the page following each species entry. For example the letter number combination of *Alloineis antillarum* is A-3: 24. The letter number sequence A-3 indicates box 3 of Section A. The number "24" following the colon in that sequence indicates the slot number.

During the organization of the collection, all slides which listed more than one species were without exception inserted in the collection under the first name listed on the slide. All the species were then listed in the index giving the same letter-number combination. Thus a given slide may be found listed under more than one diatom species and likewise the letter-number combinations given after a species may on occasion appear to be out of sequence.

Section B Boxes B-1 to B-41

All undetermined slides bearing collection localities are divided into two groups. Those collections made in the United States are in Group I and are arranged alphabetically by state. Those collections made outside the US are in the Group II World division. The slides in the Group II are divided into geographic areas and arranged alphabetically by country or locality within each area.

The locations of the slides in Section B are as Section A given in the index by the letter-number combinations following each entry.

Section C Boxes C-1 to C-5

The slides in this section are probably of culturing experiments. They are undetermined and bear no collection data; they are therefore not indexed.

Section D Boxes D-1 to D-18

Diatomacearum species typicae D-1 to D-7

Cleve and Moller's Diatoms D-8 to D-10

Cleve and Moller's Diatoms Incomplete set D-11 to D-12

Synopsis Des Diatomees de Belgique D-13 to D-18

Because of the special nature and value of intact exsiccati collections, the three found in the Cheever Herbarium have been kept intact, and together treated as a separate section. The species therefore were not included in the index which follows, but will be found in a separate "Index to the Exsiccati of the Cheever Herbarium."

Addendum Boxes B-36 to B-41

The addendum at the end of this index contains a fair number of slides belonging to both Group I and Group II. These slides were discovered after the collection had been organized and could not be included in the index A or B.

Addendum Section A

B-41: 71 *Pleurosigma* sp.
 B-41: 72 *Synedra goulardi* Bres.
 B-41: 73 *Toxonidea gregoriana*

Addendum Section B

I. United States

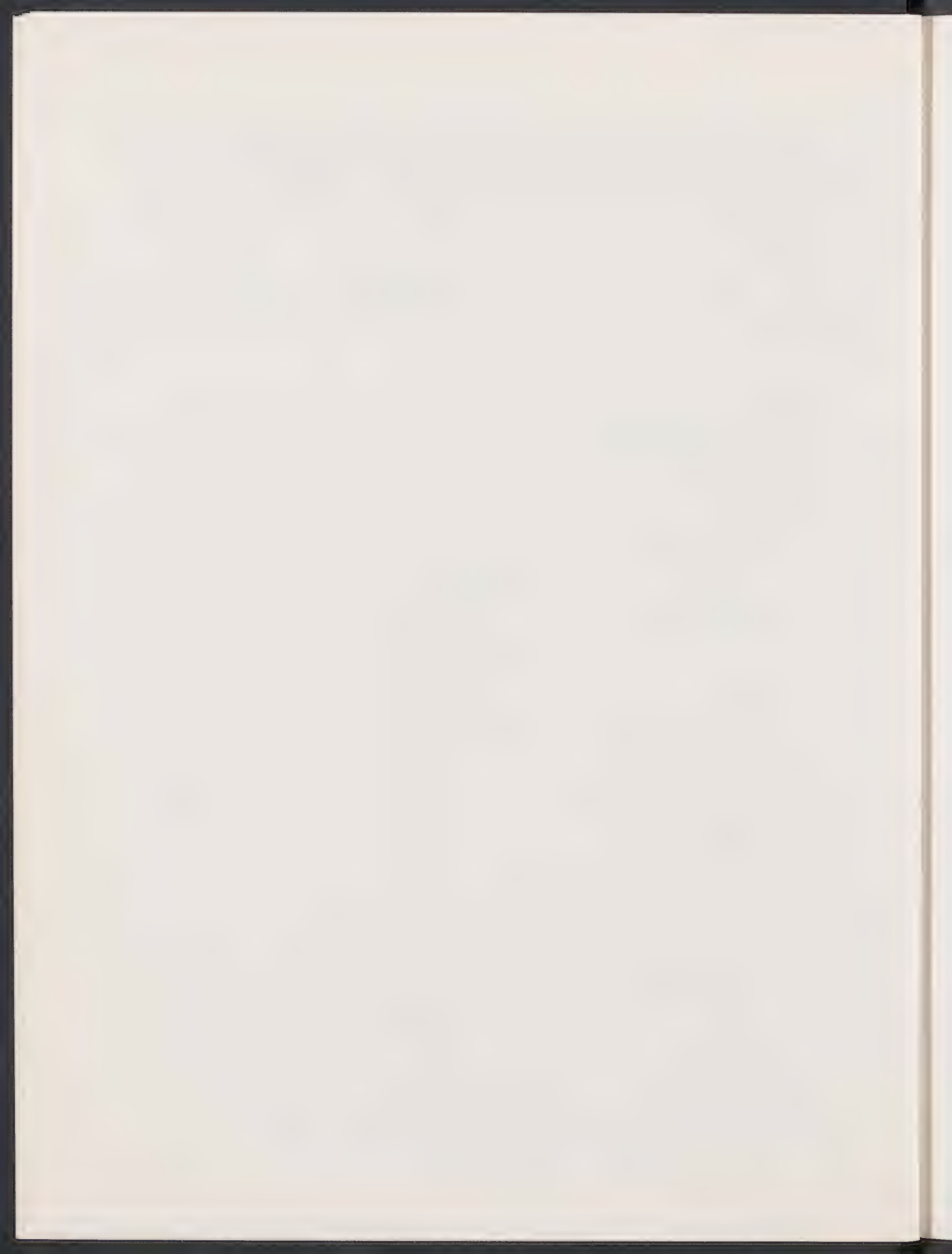
1. Alaska	B-36: 56
	B-36: 57
2. California	B-37: 1-4
3. Connecticut	5-100
	B-38: 1-100
	B-39: 1-100
	B-40: 1-11
4. Maine	B-40: 12-14
5. Maryland	B-40: 15-22
6. Massachusetts	B-40: 23-30
7. Nevada	31-32
8. New Hampshire	33-37
9. New Jersey	38-39
10. New York	40-41
11. Pennsylvania	42
12. Virginia	43-63
13. Washington	64-71

II. World

Canada 72-74

South America

1. Brasil	75-79
2. Chile	80-81
3. Cuba	82
4. Guatemala	83
5. Peru	B-40: 84-87
6. West Indies	88-90



Asia, Ociaania, Eurasia and Africa

1. Asia	B-40: 91-94
2. East Indies	95
3. St. Paul	96-97
4. Kerguelenland	98-100
5. Malaysia	B-41: 1-2
6. New Zealand	B-41: 3-6
7. Turkey	7

Europe

1. Azores	B-41: 8
2. Denmark	9-26
3. Findland	27
4. France	28-37
5. Germany	38-50
6. Ireland	51-54
7. Italy	55-58
8. Scotland	59-62
9. Spain	63-65
10. Sweden	66-67

Unplaceable localities

B-41: 68-71

Section C Miscellaneous

I. Arranged Diatoms and Type Plates

1. C.H. Kain	C-1: 1
2. I.D. Mollev	2-5
3. Wm. H. Pratt	6-45
4. E. Thum	46
5. D.B. Ward	47

Index A

1. Achnanthes

A. sp.	A-1:	1
A. baldjikii Grun.	.....	2
A. brevipes Agardh.	.....	3-10
A. costata Johnst.	.....	11
A. exigua Grun.	.....	12-13
A. heteropsis Grun.	.....	14
A. inflata Grun.	.....	15-16
A. longipes Agardh.	.....	17-20
A. manifera Brun	.....	21
A. <u>pennaeformis</u> Grev. orig.	.....	22
A. subsessilis Ehrb.	.....	23-27
A. turgens Ehrb.	.....	27
A. ventricosa Ehrb.	.....	16

2. Actinella

A. punctata Lewis.		28
--------------------	-------	----

3. Actinocyclus

A. sp. .	.....	29-39
A. alienus Grun.	.....	40-41
A. alienus Grun. var. californicus Grun.	.....	42
A. barkleyi Grun.	.....	43-59
A. crassus Kutz.	.....	60
A. dubius Grun.	.....	61-67
A. dubius Ralfs	.....	
A. ehrenbergii Schum.	.....	68-70
A. ellipticus Grun.	.....	71-72
A. interpunctatus T.T.W.	.....	73
A. moniliformis Ralfs	.....	74
A. <u>niagarae</u> H.L.Sm. orig.	.....	75
A. oliverianus O'Meara	.....	76
A. ovalis Rop.	.....	77
A. peplum Brun.	.....	78
A. ralfsii Ralfs	.....	79-83
A. splendens Ralfs	.....	84

4. Actinodiscus

A. <u>atlanticus</u> Kain & Schult. n. sp.	.....	85
A. barbadensis Grev.	.....	86-88
A. grayii Grove	.....	89

5. Actinoptychus

A. sp.	A-2:	61-79
A. amblyoceres Schmidt	A-1:	90-91
A. areolatus Schmidt	.....	92-93
A. biformis Brun	.....	94
A. bismarkii Schmidt	.....	95-98
A. biternarius Ehrb.	.....	99-100
A. boliviensis Grun.	A-2:	1
A. cellulosus Ehrb.	.....	2
A. decorans Schmidt	.....	3
A. elegans	.....	4-5
A. excellens Schmidt.	.....	6
A. fuscus Gr. & St.	.....	7
A. glabralus Grun.	.....	8
A. grundleri Schmidt	.....	2; 9-15
A. halionyxs Grun.	.....	16-17
A. heliopelta Grun. orig.	.....	6; 18-48
A. heterostrophus Schmidt	.....	49
A. hexagonus Grun.	.....	50
A. hillabryanus Brun	.....	51
A. interpunctatus Brightw.	.....	52
A. maculatus Gr. & St.	.....	53-55
A. macraei Deby	.....	56
A. octodenarius Ehrb.	.....	57-58
A. simbirskianus Smith	.....	59-60
A. spiniferus	.....	80
A. splendens Ralfs	.....	81-93
A. splendens Ralfs	.....	94
var. halonix Grun.		
A. splendidissimus	.....	95
A. stella Schmidt	.....	96-100
A. stella Schmidt	A:3	1
var. thumii Hann.		
A. superbus Bail	.....	2
A. temperei Schmidt	.....	3
A. trifoliatus Tempr.	.....	4
A. trilingulatus Prit.	.....	5
A. triradiatus Ralfs	.....	6
A. undulatus Ehrb.	.....	7-14
A. undulatus Ehrb.	.....	15
f. maxima		
A. velatus Ehrb.	.....	16-17
A. vulgaris Schum.	.....	18
var. maculata Gr. & St.		
A. wittianus J.C. & C.	.....	19-21
A. wittii Jans.	.....	22

6. Actinosphaenia

A. splendens Shadb.		23
---------------------	-------	----

7.	Alloineis		
	A. antillarum Cleve & Grun.	A:3	24
	A. grundleri Cleve & Grun.	.....	25
8.	Amphicampa		
	A. mirabilis Ehrb.	.....	26
9.	Amhipentas		
	A. fluscuosus	.....	27
10.	Amhipleura		
	A. hindmani	.....	28-29
	A. lindheimerii Cleve	.....	30-32
	A. pellucida Kutz	.....	33-43
	A. sigmoidea W. Sm.	.....	44
11.	Amhiprora		
	A. sp.	.....	45
	A. conspicua Grev.	.....	46
	A. elegans W. Sm.	.....	47
	A. hyalina Grev.	.....	48
	A. lepidoptera Greg.	.....	49-50
	A. nereis Lewis	.....	51
	A. pulchra Bail	.....	52-54
	A. samoensis Grun.	.....	55
12.	Amphitetras		
	A. antedeluviana Ehrb.	.....	56-57
	A. cruciata Jan. & Rabh.	.....	58
	A. crucifera Kitt.	.....	59
	A. elegans Grev.	.....	60
	A. mortimerii Chase	.....	61
	A. ornata Shadb.	.....	62-64
	A. producta Grev.	.....	65-66
13.	Amphora		
	A. sp.	.....	67-69
	A. amphioxys Bail.	.....	70
	A. angularis Greg.	.....	71
	A. angusta Greg.	.....	72
	A. arcus Greg.	.....	73
	A. arenaria Donk.	.....	74
	A. bigibba Grun.	.....	75
	A. binodis Greg.	.....	76
	A. capensis Schmidt.	.....	77
	A. cingulata Cleve	.....	65
	A. clevei Grun.	.....	78-81
	A. commutata Grun.	.....	82

A. costata W. Sm.	.....	83
A. crassa Greg.	.....	65; 84-86
A. cymbifera Greg.	.....	87-88
A. decussata Grun.	.....	89
A. dibia Greg.	.....	90
A. egregia Ehrb.	.....	65; 91-92
A. eulensteinii Grun.	.....	93-94
A. granulata Greg.	.....	95
A. grevilleana Greg.	.....	96-97
A. grundleri Grun.	.....	65; 98-99
A. intersecta Schmidt	A-4:1-2	
A. kamorthensis Grun.	.....	3
A. limpidus Jans.	.....	4
A. lyrata Greg.	.....	5
A. mexicana Schmidt	.....	6
A. micans Schmidt.	.....	7
A. oblecta Bail.	.....	8
A. obtusa Greg.	.....	9-10
A. ovalis Kutz	.....	11-13
A. ostrearia Breb.	A-3:89	
	A-4:3	
A. plicata Greg.	.....	14
A. proteus Greg.	.....	15-16
A. quadricostata Rabh.	.....	7
A. reichardtiana Grun.	A-3:65	
	A-4:17	
A. rhombica Kitt.	.....	18
A. schleinitzii Jans.	.....	19
A. schmidtii Grun.	.....	20
A. spectabilis Greg.	.....	21
A. turgida Greg.	A-3:89	
A. undulata Grev.	A-4:22	
14. Anaulus		
A. campylodiscus Ehrb.	.....	23
A. minutus Grun.	.....	24
15. Anomoeoneis		
A. serians Cleve.	.....	25-26
f. minor Boyer		
16. Anthodiscus		
A. floreatus Gr. & St.	.....	27-35
17. Aprora		
A. cornuta	.....	36
18. Arachnoidiscus		
A. sp.	.....	37-44

A. barbadensis Schmidt.	A-4:	45
A. californicus Schmidt.	.....	46
A. ehrenbergii Bail.	.....	47-100
	A-5:	1-10
A. ehrenbergii Bail.	.....	12
var. californicus		
A. ehrenbergii Bail.	.....	13
var. montereganus Schmidt.		
A. ehrenbergii Bail.	.....	14-17
var. omarensis		
A. grevilleanus Hard.	A-4:	47
	A-5:	18-23
A. indicus Ehrb.	.....	24-33
A. japonica Ehrb.	.....	34
A. ornatus Ehrb.	A-4:	47
	A-5:	35-40
A. ornatus Ehrb.	.....	41-58
var. montereganus Schmidt.		
20. Asterionella		
A. sp.	.....	60
A. formosa Grun.	.....	59
A. gracillima	.....	61
A. synedraeforme Grev.	.....	62
21. Asterolampra		
A. sp.	.....	63-64
A. affinis Grev.	.....	65
A. ambigua Grev.	.....	66
A. brebissonia Grev.	.....	67-68
A. brightwelliana Grev.	.....	69
A. brookei Bail.	.....	70-71
A. concinna Grev.	.....	72-73
A. crenata Grev.	.....	74
A. decora Grev.	.....	76-77
	A-21:	90
A. elegans Grev.	A-5:	78
A. helipetta	.....	86
A. insignis Gr. & St.	.....	79
A. marginata Grev.	.....	80-82
A. marylandica Ehrb.	.....	83-87
A. ralfsiana Grev.	.....	77, 88-90
A. rotunda Grev.	.....	91-93
A. rylandsiana Grev.	.....	77; 94
A. stellaris Tempr. & Brun.	.....	95
A. stictodiscus	.....	98
A. vulgaris Grev.	.....	65; 96-100
	A-6:	1
22. Asteromphallus		
A. sp.	.....	2
A. arachne Grev.	.....	3
A. brookei Bail.	.....	4-5

A. elegans Grev.	.....	6
A. hepactis Grev.	.....	7
A. hookerii Ehrb.	.....	8
A. moronensis Grev.	.....	9-11
A. ralfsiana Grun.	.....	12

23. Aulacodiscus

A. sp.	A-5:	63
	A-6:	13-16
A. affinis Grun.	.....	17
A. africanus Cott.	.....	18-20
A. amoensis Grev.	.....	21-31
A. angulatus Grev.	.....	32-34
A. argus Schmidt.	.....	35-41
A. boliviensis Breb.	.....	42
A. brightwellii Jans.	.....	43-47
A. brownei Norm.	.....	48
A. brunii Schmidt.	.....	49-52
A. cellulosus Gr. & St.	.....	53-54
var. plana Gr. & St.		
A. comberi Arnott.	.....	55-59
A. crux Ehrb.	.....	60-66
A. decorus Grev.	.....	67-68
A. <u>decorus</u> Grev. orig.	.....	69
var. samoensis Grun.		
A. ehrenbergii Jans.	.....	70
A. fromosus Arnott.	.....	71-73
A. germanicus Om.	.....	74
A. giganteus Temp. & Brun.	.....	75
A. grunowii Cleve.	.....	76-78
A. huttonii Gr. & St.	.....	79-80
A. inflatus Grev.	.....	81-82
A. <u>janishii</u> Gr. & St. n. sp.	.....	83-100
A. johnsonii Arnott.	A-7:	1-2
A. <u>jutlandicus</u> Kitt. orig.	.....	3
A. kittoni Arnott.	A-1:	65
	A-7:	4-20
A. macraeanus Grev.	.....	21
A. mammosus Grev.	.....	22
A. margaritaceus Ralfs.	A-6:	55;83
	A-7:	23-52
A. molleri Grun.	.....	8, 53-61
A. multispadix Temp. & Brun.	.....	62
A. nova-seclandicus Grun.	.....	63-66
A. nuttoni Gr. & St.	.....	67
A. omaruensis Grun.	.....	68-70
A. oreanus Bail.	.....	71-100
	A-8:	1, 85
A. orientalis Grev.	A-4:	48-49
	A-5:	8
	A-7:	8
	A-8:	5-25
A. pallidus Grev.	.....	26

A. patulus Grun.	A-8:	27-31
A. petersii Ehrb.	.....	32
A. probabilis Schmidt.	.....	33-34
A. pulcher Norm.	.....	36-37
A. radiatus Bail.	.....	38-39
A. radiosus Gr. & St.	.....	40-42
A. rattrayii Gr. & St.	.....	43-45
A. rogersii schmidt.	.....	46-48
A. samoensis n. sp.	.....	49-50
A. scaber Ralfs.	.....	51-52
A. septus Schmidt.	.....	53
A. sollittianus Norm.	A-7:	59
	A-8:	54-57
	A-10:	83
A. sollitianus Norm.	A-8:	58
var. nova-zelandia Gr. & St.		
A. stoschii Jans.	.....	59
A. sturtii Kitt.	.....	60
A. subrimosus Grun.	.....	61
A. temperei Schmidt.	A-8:	62
A. thumii Schmidt.	.....	63-65
A. tubulo-crenatus Tempr. & Brun.	.....	66

24. Auliscus

A sp.	A-9:	50-65
A. biddulphia Kitt.	A-8:	67-68
A. biddulphia Kitt.	.....	69
var. kittonii		
A. caelatus Bail.	.....	70-87
A. clevei Grun.	.....	88
A. clypeus	.....	89
A. claboratus Ralfs.	.....	90
A. elegans Grev.	.....	91
A. ellipticus Schmidt.	.....	92
A. fenestratus Gr. & St.	.....	93
A. formosus Leudg. & Fortm.	.....	94
A. fulcratus Schmidt.	.....	95
A. grevillii Jans.	.....	96
A. grunowii Schmidt.	.....	97
A. grunowii Schmidt.	.....	98-99
var. californicus Gr.		
A. hardmenianus Grev.	A-9:	1-2
A. hauckii Pant.	.....	3-6
A. intercedens Jans.	.....	7
A. johnsonianus Grev.	.....	8
A. johnsonii Schmidt.	.....	9-10
A. joynsonii Schmidt.	.....	11
A. lacunosus Gr. & St.	.....	12-13
A. lineatus Gr. & St.	.....	14
A. macraeanus Grev.	A-8:	74
	A-9:	15-19
A. mirabilis Grev.	.....	20-24
A. omasuensis Gr. & St.	.....	25-33
A. ornatus Grev.	.....	34

A. ovalis Arnott.	A-9:	35
	A-8:	74
A. pruinus Bail.	A-9:	36-43
A. pruinus Bail.	.....	44
var. subreticulata Grun.		
A. punctatus Bail.	.....	45-49
A. racemosus Ralfs.	.....	66-68
A. radiatus Bail.	.....	69-73
A. reticulata Grev.	.....	43
A. rhipis Schmidt.	.....	74-75
A. sculptus Ralfs.	.....	76-94
A. speciosus Schmidt.	.....	95-97
A. spinosus Chris.	A-10:	1-3
A. stockhardtii Jans.	.....	4
A. subreticulatus Rattr.	.....	5-6
24. Bacillaria		
B. paradox Gmelin.	.....	7
25. Bacteriastrium		
B. bifuratum	.....	8
B. curvatum Shadb.	.....	9
B. furcatum Shadb.	.....	10
B. varians Lauder.	.....	11-14
26. Biblarium		
B. ellipticum Ehrb.	.....	15
B. speciosum Ehrb.	.....	16
B. stella Ehrb.	.....	17
B. strumosum Ehrb.	.....	17
27. Biddulphia		
B. sp. Bail.	.....	18-19
B. arctica Boyer	.....	20
B. aurita Breb.	.....	21-24
B. baileyi W. Sm.	.....	25-27
B. balaena Brightw.	.....	28
B. brittoniana Kain. & Schult. n.sp.	.....	29-30
B. chinensis Grev.	A-5:	62
B. cruciformis	A-10:	31-32
B. edwardsii H. L. Sm.	.....	33-34
B. elegantula Grev.	.....	35
B. fimbriata Grev.	.....	36
B. flaminea H. L. S. orig.	.....	37-38
B. johnsoniana Grev.	.....	39-40
B. laevis Ehrb.	.....	41
B. longispina Grev.	.....	42
B. montareyii	.....	20
B. primordialis Burn	.....	43-44

B. pulchella Gray	A-10: 45-50
B. punctata Grev.	 51
B. regina W. Sm.	 52
B. reticulata Rop.	 53-57
B. rhombis W. Sm.	 58-60
B. roperiana Grev.	 61-64
B. tenuicornis Grev.	 65
B. tridentata Ehrb.	 66
B. tuomeyi Bail.	 52, 67-70
B. turgida W. Sm.	 71
B. vittata Gr. & St.	 72
B. weissflogii Jan.	 73-74
28. Brebissonia	
B. boeckii Grun.	 75-79
B. weflogii Grun.	 80
29. Brightwellia	
B. cornata Ralfs.	 81
B. elaborata Grev.	 82-84
B. johnsonii Breb.	 85-88
B. pulchra Grun.	 87-92
30. Caloneis	
C. sp.	 93-94
C. bivittata Pant.	 95-97
C. permagna Cleve.	 98-100
	A-11 1
C. robusta Cleve.	 2
31. Campylodiscus	
C. sp. Bleisch.	 3-17
C. adornatus Schmidt.	 18-19
C. adriaticus Grun.	 20
C. ambiguus Grev.	 21
C. angularis Greg.	 22
C. argus Bail.	 23
C. biangulatus Grev.	A-3: 73
C. bifuncatus Schmidt.	A-11: 24
C. brightwelli Grun.	 25
C. browneanus Grev.	 20
C. clypeus Ehrb.	 26-36
C. concinnus Grev.	 37
C. cornilla Brun.	 38
C. costatus W. Sm.	 39
C. cribratus W. Sm.	 40-42
C. daemelianus Grun.	 43-51
C. decorus Breb.	 54
C. delicatus Weis. f.	 52-53
C. diplostictus Norm.	 55
C. ecclesianus Grev.	 20, 56-57
C. echeneis Ehrb.	 58-64

<i>C. ehrenbergii</i> Ralfs.	A-11:65-66
<i>C. eximius</i> Greg	 67
<i>C. grevillei</i> Leud. & Fort.	 23
<i>C. grundleri</i> Grun.	A-4: 7
<i>C. hibernicus</i> Ehrb.	A-11:68-71
<i>C. hibernicus</i> Ehrb.	 72
var. <i>occidentalis</i> Ward .	
<i>C. horologium</i> Willm.	 73-83
<i>C. imperialis</i> Grev.	 84
<i>C. kittonianus</i> Grev.	 20, 85-88
<i>C. limbatus</i> Breb.	 89
<i>C. lorenzianus</i> Grun.	 90
<i>C. ornatus</i> Grev.	 91-92
<i>C. phalangium</i> Schmidt.	A-3: 77
<i>C. punctulatus</i> Grun.	A-11:93
<i>C. rabenhorstianus</i> Vans.	 94
<i>C. ralfsii</i> W. Sm.	 95
<i>C. simulans</i> Greg.	 96
<i>C. sonderianus</i> Grun.	 45-46
<i>C. spiralis</i> W. Sm.	 97-98
<i>C. stellatus</i> Grev.	 20
<i>C. thuretii</i> Breb.	 99
<i>C. thuretii</i> Breb.	 100
var. <i>baldjikianus</i> Grun.	
<i>C. triumphans</i> Schmidt.	 37
	 25
<i>C. undulata</i> Grev.	A-12:1-2
<i>C. wallichianus</i> Grev.	 3

32. *Campyloneis*

<i>C. sp.</i>	 4
<i>C. grevillii</i> Grun.	 5
<i>C. regela</i> Grun.	 6

33. *Cerataulus*

<i>C. sp.</i>	 7
<i>C. californicus</i> Schmidt.	 8
<i>C. laevis</i> Rop.	 9
<i>C. marginatus</i> Gr. & St.	 10
<i>C. smithii</i> Ralfs.	 11
<i>C. subangulatus</i> Gr. & St.	 12-17
<i>C. titianus</i> Grun.	 18
<i>C. turgidus</i> Ehrb.	 19-20

34. *Ceratoneis*

<i>C. argus</i> Kutz.	 22
<i>C. laevis</i> Ehrb.	 23

35. *Cestodiscus*

<i>C. interruptus</i> Temp. & Perag.	 24
<i>C. ovalis</i> Grev.	 25-26
<i>C. pulchellus</i> Grev.	 28

C. superbus Hardm.	.....	29
36. Chaetoceros		
C. sp.	.....	30-32
C. coarctata Lauder.	.....	33
C. dicladia Gastr.	.....	34
C. didymus Ehrb.	.....	35-36
C. landeri Ralfs.	.....	37
37. Cladogramma		
C. dalifornicum Ehrb.	A-12:	38
C. conicum Grev.	.....	39
38. Clavularia		
C. barbadensis Grev.	.....	40
40. Climacosira		
C. mirificum Grun. orig.	.....	41
41. Climacosphenia		
C. sp.	.....	42
C. elongata Bail.	.....	43
C. monilegera Ehrb.	.....	44-46
C. monilifera Ehrb.	.....	47-52
42. Cocconeis		
C. sp.	A-13:	11-18
C. adjuncta Schmidt.	A-12:	53
C. adriatica Kutz.	.....	54
C. antiqua Tempr. & Brun	.....	55-63
C. antiqua Tempr. & Brun f. fossilis Cleve	.....	64-65
C. barbadensis Grev.	.....	66
C. borealis Ehrb.	.....	67
C. circumcinata Schmidt.	.....	63, 68-70
C. clavigera om.	.....	71
C. cornuta Jans.	.....	72
C. costata Greg.	.....	73/A-40:98
C. dirupta Ehrb.	.....	74-78
C. distans Greg.	.....	79
C. emmerici Jans.	.....	80
C. excentrica Donk.	.....	81
C. fimbriata Brightw.	.....	83-84
C. finnica Ehrb.	.....	85
C. grantiana Grev.	.....	86
C. heteroidea Hants.	.....	87
C. lineata Ehrb.	.....	88

C. naviculoides Grev.	.....	89-90
C. nitida Greg.	.....	91
C. notabilis Schmidt.	.....	63
C. pediculus Ehrb.	.....	92
C. pellicidia Kutz.	.....	62-63, 93-96
C. pseudomarginata Greg.	.....	73, 79, 97
C. punctatissima Grev.	.....	98
C. regalis Grev.	.....	99
C. scutellum Ehrb.	A-13:	1-3
C. splendida Greg.	.....	4-7
C. verrucosa Brun.	.....	8
C. vitiea Brun	.....	9
C. voluta Brun	.....	10
43. Cocconema		
C. asperum Ehrb.	A-12:	88
C. cimbiforme	A-13:	19
C. cistula Ehrb.	.....	20
C. cornutum Ehrb.	.....	21
C. excisa H.L. Sm.	.....	22
C. lanceolatum Ehrb.	.....	23
C. mexicanum Ehrb.	.....	24
C. placentula	.....	25
44. corinna		
C. elegans Heib.	A-40:	99
45. Coscinodiscus		
C. sp.	A-1:	35
	A-11:	4-8
	A-13:	26-46
C. apiculatus Ehrb.	.....	47-50
C. arafuraensis om.	.....	51
C. argus Ehrb.	.....	52-55
C. armatus Grev.	.....	56
C. asteroides Luard. & Witt.	.....	57-60
C. asteromphalus Ehrb.	.....	53, 61-63
C. biangulatus Schmidt.	.....	64-72
C. biradiatus Grev.	.....	73-74
C. borealis Bail.	A-2:	35
	A-13:	75-77
C. centralis Ehrb.	.....	78-79
C. cingulatus Ehrb.	A-1:	29
C. concavus Ehrb.	A-13:	80-81
C. concinnus W. Sm.	.....	82-84
C. craspedodiscus Kutz.	.....	51, 85
C. debilis Grove.	.....	86-87
C. denarius Schmidt.	.....	88
	.....	89-100
C. dorama Schmidt.	A-14:	1
C. elegans Grev.	.....	2-5
C. elegans Grev.	A-5:	98
var. spinifera Gr. & St.	A-14:	6

<i>C. elegantulus</i> Grev.	A-14: 7
<i>C. ellipticus</i> Grun.	 8
<i>C. elongatus</i> Grun.	 9
<i>C. excavatus</i> Grev.	 10-19
<i>C. excentricus</i> Ehrb.	 20-23
<i>C. fuscus</i> Norm.	A-14: 24
<i>C. galapagensis</i> Ratt.	 25
<i>C. gigas</i> Ehrb.	A-13: 85
	A-14: 26-28
<i>C. griseus</i> Grev.	 29
<i>C. grunovii</i> Pant.	 30
<i>C. heteroporus</i> Ehrb.	 31-32
<i>C. increscens</i> Grun.	 33
<i>C. incretus</i> Schmidt.	 34-39
<i>C. kryophilus</i> Grun.	 40
<i>C. lentiginosus</i> Jans.	 41
<i>C. lewisianus</i> Grev.	 42-45
<i>C. limbatus</i> Ehrb.	 46
<i>C. lineatus</i> Ehrb.	 47-48
<i>C. marginatus</i> Ehrb.	 47-54
<i>C. megalomma</i> Schmidt.	A-13: 53
	A-14: 55-57
<i>C. micans</i> Schmidt.	A-5: 40
	A-14: 58-59
<i>C. minutus</i> Kutz.	 60
<i>C. moellerii</i> Schmidt.	 61
<i>C. nitidulus</i> Grun.	 62
<i>C. nitidus</i> Greg.	 63-64
<i>C. nodulifer</i> Schmidt.	 65
<i>C. normanii</i> Greg.	 66
<i>C. oblongus</i> Grev.	 67-68
<i>C. oculus-iridis</i> Ehrb.	 69-82
<i>C. omphalanthus</i> Ehrb.	 83-84
<i>C. ovalis</i> Rop.	 85
<i>C. ovum</i> Tempr. & Pera.	 86
<i>C. patellaeformis</i> Grev.	 87-88
<i>C. perforatus</i> Ehrb.	 89
<i>C. radiatus</i> Ehrb.	 90-94
<i>C. robertsonianus</i>	 95
<i>C. robustus</i> Grev.	A-13: 53
	A-14: 96-100
<i>C. simbirskianus</i> Grun.	A-15: 1
<i>C. sol</i> Wall.	 2
<i>C. spiniferus</i> G. & St.	 3
<i>C. stellaris</i> Rop.	 4-5
<i>C. subtilis</i> Ehrb.	A-1: 68
	A-15: 6-10
<i>C. symmetricus</i> Grev.	 11-26
<i>C. temperei</i> Brun	 27
<i>C. tuberculatus</i> Grev.	 28-29
<i>C. bigilans</i> Schmidt.	 30

46. *Cosmoidiscus*

<i>C. sp.</i>	 31
<i>C. carconesis</i> Grun.	 32-33

C. elegans Grev.	.....	34
C. obliquus Grev.	.....	35
47. Craspedodiscus		
C. sp.	A-14:	27
C. coronatus Brightw.	A-15:	36
C. coscinodiscus Ehrb.	A-13:	60
	A-15:	37-52
C. elegans Ehrb.	.....	53-67
C. microdiscus Ehrb.	.....	68
C. minor Cleve. & Ehrb.	.....	69
C. moelleris Schmidt.	.....	70
48. Craspedosporus		
C. elegans Gr. & St.	.....	71
C. pantoesoli Brun.	.....	72
49. Craticula		
C. sp.	A-23:	49
C. ehrenbergii Grun. orig.	A-15:	73
C. elegans C.F. n. sp.	.....	74
50. Cresswellia		
C. sp.	.....	4
C. ferox Grev.	.....	75
C. superba Grev.	A-14:	7
	A-15:	76-77
51. Cyclotella		
C. actinocyllus Brun. n.sp.	.....	78
C. antiqua W. Sm.	.....	79-82
C. astraea Kutz.	.....	83
C. astraea Kutz.	.....	32-33
var. carconensis		
C. bodanica Eul. in Grun.	.....	84
C. comta Kutz.	.....	85
C. comta Kutz.	.....	86
var. radiosa Grun.		
C. rotula Kutz.	.....	87
C. striata Grun.	.....	88-89
52. Cylindrotheca		
C. gracilis Grun.	.....	90-91
53. Cymatopleura		
C. cochlea Brun.	.....	92-94
C. constricta Grun.	.....	95
C. elliptica W. Sm.	A-15:	96-100
	A-16:	1-2

C. hibernica W. Sm.	A-15:	87
C. rhomboides Hants.	A-16:	3-6
C. solea W. Sm.	.....	7-13
54. Cymatosira		
C. lorenziana Grun.	.....	14
55. Cymbella		
C. sp.	A-13:	24
	A-16:	15-20
C. affinis Kutz.	.....	21
C. aspera Cleve	.....	22-24
C. cistula Kutz.	.....	25-33
C. cuspidata Kutz.	.....	34-37
C. cymbiformis Agandh.	.....	38-39
C. densa	.....	40-41
C. ehrenbergii Kutz.	.....	42-45
C. gastroides Kutz.	.....	46-48
C. heteropheura Ralfs.	.....	49-59
C. kamtschatica Grun.	.....	60-62
C. lanceolata van Heurck	.....	63
C. mexicana Cleve	.....	64
C. navicula Skvort.	.....	65
C. parva Woll.	.....	66
C. pusilla Grun.	.....	67
C. triangulum Cleve	.....	68
56. Cymbosira		
C. agardhi Kutz.	.....	69
57. Denticula		
D. antillarum Cleve	.....	70-71
D. distans Greg.	A-16:	72-73
D. frigida Kutz.	.....	74
D. marina Greg.	.....	75
D. nicobarica Grun.	.....	76
D. obtusa Kutz.	.....	77
D. stanrophora Greg.	.....	71
D. thermalis Kutz.	.....	78
58. Desogonium		
D. mirabile Eul.	.....	79
59. Diatoma		
D. anceps Ehrb.	.....	80
D. ehrenbergii Kutz.	.....	81
D. elongatum W. Sm.	.....	82-83
D. grande W. Sm.	.....	84
D. hiemale Heib.	.....	85
D. maximum Grun.	.....	86-89

D. vulgare Bory.	A-16: 90-92
60. Diatomella	
D. balfouriana Grev.	 78, 93-94
61. Dicladia	
D. capreolus Ehrb.	 95-96
62. Dimeregramma	
D. harrisonii Ralfs	 97
D. minus Ralfs	 98
D. mutabile Ralfs	 99
63. Diploneis	
D. sp.	A-17: 1-28
D. apis Donk.	 29-31
D. bombus Ehrb.	 32-41
D. bombus Ehrb.	 42
var. gemina Kutz.	
D. crabro Ehrb.	 43
D. didyma Ehrb.	 48
D. elliptica Ehrb.	 49-55
D. gemmata Grev.	 56-57
D. gemmatula Schmidt.	 58-62
D. gruendleri Cleve	 63
D. interrupta Cleve	 64
D. nitescens Cleve	 65
D. ornata Cleve	 66-82
D. pedalis Brun	 83
D. sideralis	 84
D. smithii Breb.	 85-91
D. splendida Cleve	 92
D. taschenbergeri Hustedt	 93-94
D. vagabunde Cleve	 95
64. Discoplea	
D. sinensis Ehrb.	 96
65. Ditylum	
D. brightwellii Grun.	 97
var. inequalis Grun.	
66. Donkinia	
D. recta Ralfs.	 98-99
67. Doryphora	
D. ampiceros Kutz.	 100

D. boeckii W. Sm.	A-18: 1	
68. Encyonema		
E. lunula Grun.	.....	2-14
E. paradoxum Kutz.	.....	15
E. prostratum Ralfs	.....	16
69. Endyctia		
E. sp.	.....	17
E. mediterranea	.....	18-19
E. oceanica Ehrb.	.....	20-21
70. Entogonia		
E. davyana Grev.	.....	22
71. Entopyla		
E. australis Ehrb.	.....	23-25
E. australis Ehrb.	.....	26
var. gigantea Fricke.		
E. puchella Grun.	.....	27
72. Epithemia		
E. sp.	A-16: 20	
	A-18: 28-31	
E. argus Kutz.	.....	32-33
E. clavata Dickie orig.	.....	34
E. faba Kutz.	.....	47
E. gibba Kutz.	.....	35-37
E. granulata Kutz.	.....	38
E. hynomanii W. Sm.	.....	39
E. marina Donk.	.....	40
E. musculus Kutz.	.....	41
E. ocellata Kutz.	.....	42-43
E. saxonica Kutz.	.....	44
E. sorex Kutz.	.....	45-47
E. succinta Breb. & Sm.	.....	48
E. turgida Ehrb.	.....	47, 49-52
E. ventricosa Kutz.	.....	53-54
E. zebra Kutz.	.....	54-55
73. Eucampia		
E. striata Stolt.	A-18	56
74. Eunotia		
E. sp.	.....	57-67
E. diadema Ehrb.	.....	68
E. didyma Grun.	.....	69
E. diodon Ehrb.	.....	70-71
E. eruca Ehrb.	.....	72

E. falx Greg.	A-18:	73
E. flexulosa Kutz. orig.	.....	74
E. formica Ehrb.	.....	75
E. gibberula Ehrb.	.....	76
E. hemicyclus Grun.	.....	77-78
E. hexaglypha Ehrb.	.....	79
E. indica Grun.	.....	80
E. kurziana Grun.	.....	81
E. monodon Ehrb.	.....	82-83
E. papilis Grun.	.....	84
E. pectinalis Rab.	.....	85-86
E. robusta Ralfs	.....	87-94
E. soleirolii Rab.	.....	95
E. tetraodon Ehrb.	.....	96
E. tetricula Ehrb.	.....	97
E. undulata Ralfs.	.....	98-99
E. ventricosa Ehrb.	.....	100
75. Eunotiopsis		
E. janischii Grun.	A-19:	1
76. Eunotogramma		
E. laevis Grun.	.....	2
E. weissii Grun.	.....	3
E. weissii Grun.	.....	3-4
var. producta Grove		
77. Euodia		
E. barbadensis Grev.	.....	5-9
E. brightwellii Ralfs	.....	10
E. frauenfeldii Grun. orig.	.....	11
E. gibba Bail.	.....	12-14
E. janischii Grun.	.....	15
E. marylandica Mills.	.....	16
78. Eyphyllodium		
E. sp. Shad.	.....	17
79. Eupleura		
E. sp.	.....	18
E. pulchella Arnott	.....	19
E. telfairiae Moll.	.....	20
80. Eupodiscus		
E. sp.	.....	21
E. argus W. Sm.	A-12:	26
E. commutatus Grun.	.....	33
E. inconspicuus Ratt.	.....	34
E. jonesianus Grev.	.....	35-40

- | | |
|-------------------------------|------------------|
| E. oculatus Grev. |A-19: 41-47 |
| E. radiatus Bail. |A-2: 97 |
| |A-19: 48-55 |
| E. rogersii Ehrb. | 56-65 |
| E. subtilis Ralfs. | 66-67 |
| E. triloculatus Grev. | 68 |
| E. <u>velatus</u> Grun. orig. | 69-70 |
| 81. Eutogonia | |
| E. marginata |A-19: 71 |
| 82. Fragilaria | |
| F. sp. | 72-75 |
| F. binodis Ehrb. | 76 |
| F. capucina Desm. | 77-78 |
| F. laevis Ehrb. | 79 |
| F. mesolepta Rab. | 80-81 |
| F. pinnata Ehrb. | 82 |
| F. schwartzii Grun. | 83-84 |
| F. striatula Lyng. | 85 |
| F. ungeriana Grun. | 86 |
| F. virescens Ralfs. | 87 |
| F. viridis | 88 |
| 83. Frustulia | |
| F. sp. | 89-91 |
| F. construens | 92 |
| F. lewisiana De Toni | 93 |
| F. rhomboides De Toni |A-18: 63 |
| | A-19: 94-98 |
| | A-20: 1-8 |
| F. saxonica Rabh. | 9-21 |
| 84. Gallionella | |
| G. punctigera Ehrb. | 22 |
| 85. Gephyria | |
| G. incurvata Arnott. |A-18: 28 |
| G. media Arnott. |A-5: 40 |
| | A-20: 23-24 |
| G. media Arnott. | 25 |
| f. miocena Fricke | |
| 86. Glyphodesmis | |
| G. eximia Grev. |A:20 26 |
| G. williamsonii Grun. | 27-29 |

87. *Glyphodiscus*

<i>G. stellatus</i> Grev.	A-9: 50
	A-20: 30-34
<i>G. strigilatus</i> Schmidt.	 35

88. *Gomphogramma*

<i>G. rupestre</i> Braun orig.	A-16: 93-94
	A-20: 36-37

89. *Gomphoneis*

<i>G. sp.</i>	A-20: 38
---------------	---------------

90. *Gomphonema*

<i>G. sp.</i>	 39-42
<i>G. acuminatum</i> Grun.	 43
var. B Ehrb.	
<i>G. caespitosum</i> Ehrb.	 44
var. herculaneum	
<i>G. clavatum</i> Ehrb.	A-18: 97
	A-20: 45
<i>G. constrictum</i> Ehrb.	 46
<i>G. coronatum</i> Kutz.	 47
<i>G. cristatum</i> Ralfs	 48
<i>G. curvatum</i> Kutz	 49
<i>G. dichotomum</i> Kutz	 50
<i>G. fractum</i> Schum.	 51
<i>G. germinatum</i> Agardh	 46, 52-57
<i>G. germinatum</i> Agardh	 58
var. stricta Agardh	
<i>G. gracile</i> Ehrb.	 59
<i>G. herculeanum</i> Ehrb.	A-20: 60-62
<i>G. major</i> n. sp.	 63
<i>G. nasutum</i> Ehrb.	 64
<i>G. olivaceum</i> Lyng.	 65
<i>G. olivaceum</i> Lyng.	 66
var. bulgaris	
<i>G. pohliaeformis</i> Kutz	 64
<i>G. robustum</i> Grun.	 67
<i>G. subtile</i> Ehrb.	 68
<i>G. tenellum</i> Kutz.	 69
<i>G. trigonocephalum</i> Ehrb.	 64
<i>G. truncatum</i> Ehrb.	 46
<i>G. vibrio</i> Ehrb.	 70

91. *Gomphonitzschia*

<i>G. clevei</i> Grun.	 71
------------------------	----------

92. *Gomphopleura*

<i>G. nobilis</i> Herm. Reick.	 72
--------------------------------	----------

93. Goniothecium

<i>G. danicum</i> Grun. orig.	A-20: 73
<i>G. decoratum</i> Burn	.....
<i>G. odontella</i> Ehrb.	 74, 75-77

94. Grammatophora

<i>G. sp.</i>	A-1: 1
<i>G. arctica</i> Cleve	A-20: 78
<i>G. balfouriana</i> W. Sm.	 37
<i>G. islandica</i> Ehrb.	 79-80
<i>G. macilenta</i> W. Sm.	 81
<i>G. macilenta</i> W. Sm.	 82
var. <i>subtilis</i> Grun.	
<i>G. marina</i> Kutz	A-10: 47
	A-20: 83-85
<i>G. maxima</i> Grun.	 86
<i>G. pusilla</i> Grev.	 87
<i>G. robusta</i> Ehrb.	 88
<i>G. serpentina</i> Ehrb.	 89
<i>G. subtilissima</i> Bail.	 90

95. Grammonema

<i>G. striatula</i> Agardh	 91
var. <i>diatomacea</i> Kutz.	

96. Gyrosigma

<i>G. temperei</i> Cleve	 92
--------------------------	----------

97. Halionyxs

<i>H. undenarius</i> Ehrb.	 93
----------------------------	----------

98. Hantzschia

<i>H. marina</i> Grun.	 94
------------------------	----------

99. Heibergia

<i>H. barbadensis</i> Grev.	 95
-----------------------------	----------

100. Heliopelta

<i>H. sp.</i>	 99-100
<i>H. euléri</i> Bail	 96
<i>H. leeuwenhoeckii</i> Bail.	 97-98
<i>H. metti</i> Ehrb.	 98
	A-21: 1-3
<i>H. nitidia</i> Grev.	 4-5
<i>H. selligueii</i> Bail.	 6

101. Hemiaulus

<i>H. sp.</i>	 7-9
---------------	-----------

H. alatus Grev.	A-21:	10-12
H. amplexans Gr. & St.	.....	13
H. cariniferus Grun.	.....	14
H. chinensis Grev.	.....	15
H. februatatus Heib.	.....	14
H. hastatus Grev.	.....	10
H. heibergii Oka.	.....	11
H. kittonii Grun.	.....	16
H. lyriformis Grev.	.....	17
H. ornithocephalus Grev.	.....	18
H. podagrosus Grun.	.....	19
H. polycistinorum Ehrb.	.....	20
H. polymorphus Grun.	.....	21
H. tenuicornis Grev.	.....	22
102. Hemidiscus		
H. cuneiformis Wall.	.....	23
103. Heterostephania		
H. rothii Ehrb.	.....	24
104. Himantidium		
H. sp.	.....	25
H. arcus Ehrb.	.....	26
H. pedinale Dillw.	.....	27-28
H. solerolii Kutz.	.....	29
H. undulatum W. Sm.	.....	30
105. Homoeocladia		
H. germanica Riecht.	.....	31
106. Huttonia		
H. sp.	.....	32
107. Hyalodiscus		
H. sp.	.....	33-35
H. maximus Eul.	.....	36-38
H. stelliger Bail.	A-12:	26
H. stelliger Bail.	.....	39
H. subtilis Bail.	A-7:	74-76
	A-21:	40-48
H. subtilis Bail.	.....	49
var. californicus		
H. valens Schmidt.	.....	50-51
108. Hydrosera		
H. trigueta Wall.	.....	52-53

109. *Isthmia*

<i>I. enervis</i> Ehrb.	.....	54-56
<i>I. lindigiana</i> Fr. & Eul.	.....	57
<i>I. minima</i> Bail. n. sp.	.....	58-59
<i>I. nervosa</i> Kutz.	A-7:	76-80
	A-21:	60-75

110. *Janischia*

<i>J. antiqua</i> Grun.		76-77
-------------------------	-------	-------

111. *Kittonia*

<i>K. elaborata</i> Gr. & St.		78-85
-------------------------------	-------	-------

112. *Leudugeria*

<i>L. janischii</i> van Heurck		86
--------------------------------	-------	----

113. *Licomophora*

<i>L. capensis</i> Grun.	.....	87
<i>L. flabellata</i> Agardh.	.....	88
<i>L. pappeana</i> Grun.	.....	89

114. *Liostephania*

<i>L. comta</i> Ehrb.	.....	90
<i>L. magnifica</i> Ehrb.	A-10:	83

115. *Liradiscus*

<i>L. sp.</i>	A-21:	92
<i>L. ellipticus</i> Grev.	.....	91
<i>L. ovalis</i> Grev.	.....	93-94

116. *Lithodesmium*

<i>L. undulatum</i> Kutz.	A-21:	95
---------------------------	------------	----

117. *Mastogloia*

<i>M. angulata</i> Lewis	.....	96-98
<i>M. aquilegia</i> Grun.	.....	99
<i>M. braunii</i> Grun.	A-22:	1-2
<i>M. clodansci</i> Om. Thw.	.....	3
<i>M. jelineckiana</i> Grun.	.....	4
<i>M. jelineckii</i> Grun.	.....	5
<i>M. marginulata</i> Grun.	.....	6-7
<i>M. meleagris</i> Grun.	.....	8
<i>M. smithii</i> Thw.	.....	9-10

118. Mastogonia

M. actinoptychus Ehrb.	A-22: 11
M. crux Ehrb.	 12

119. Melosira

M. sp.	A-1: 1
	A-18: 57
	A-22: 13-20
M. arenaria Moore	 21-22
M. atmosphaerica Ehrb.	 23
M. borrerii Grev.	 24
M. californicus Ehrb.	 25
M. clavigera Grun.	 26-27
M. crenulata Rab.	 28
M. dickieii Thw. orig.	 29
M. italica Kutz.	 30-31
M. lineata Dillw.	 32-33
M. nummuloides Agardh.	 34-36
M. praeclara Schmidt.	 37
M. punctata Schmidt.	A-22: 38
M. roseana Rab.	 39-40
M. sculpta Kutz.	A-19: 75
M. sol Ehrb.	A-22: 41
M. sulcata Kutz.	 42-43
M. sulcata Kutz.	 44
var. coronata Grun.	
M. tympanum Ehrb.	 45
M. undulata Kutz.	 46
M. varians Agardh.	 47-49

120. Meridion

M. sp.	A-19: 74
M. circulare Agardh.	A-22: 50-54
M. constrictum Ralfs.	 55-57

121. Monopsia

M. mommosa Gr. & St.	 58-59
----------------------	-------------

122. Monogramma

M. smithiana Grev.	A-1: 16
--------------------	--------------

123. Navicula

N. sp.	A-3: 25
	A-11: 10
	A-21: 25
	A-22: 60-95
N. abrupta Donk.	 96
N. acuminata Kutz.	 97
N. aestuarii Breb.	 98
N. affinis Ehrb.	 99

N. americana Ehrb.	A-23: 1
N. amphirynchus Ehrb.	 2
N. amphisbaena Bory.	A-23: 3-6
N. angelorum Cleve	 7-13
N. apis Donk.	 14-15
N. arabica Grun.	 16
N. arenaria Donk.	 17
N. aspera Ehrb.	 18
N. bacillum Ehrb.	 19
N. baltica Ehrb.	 20
N. beverlyi	 21
N. bohémica Ehrb.	 22
N. bomboïdes Schmidt	 14
N. bombus	 23-25
N. bottnica Grun.	 26
N. braxiliensis Grun.	 27-29
N. brevis Greg.	 30
N. bullata Norm.	 31
N. californica Grev.	 32-34
N. californica Grev.	 35
var. campechiana Grun.	
N. carassius Grun.	 36
N. cardinalis Ehrb.	 37-38
N. cardinalis Ehrb.	 39
var. laxihuctata Cleve	
N. clavata Greg.	 40
N. clavata Greg.	 41
var. elliptica Lica.	
N. columnaris Ehrb.	 42
N. compressa H.L.Sm.	 43
N. crabro Kutz.	 14-15, 44
N. crucicula Donk.	 45
N. cuspidata Kutz.	 46-55
N. clavata Schmidt.	 14
N. definite Gr. & St.	 56
N. delawarensis Grun.	 57-58
N. denticulata O'M.	 59
N. digito-radiata Greg.	 60
N. dilata Ehrb.	 61
N. diplosticta Grun.	 15, 62
N. directa W. Sm.	 63
N. disciformis Pett.	 64
N. divergens W. Sm.	 65
N. dubia Ehrb.	 66
N. egyptiaca Grev.	 67
N. elegans W. Sm.	 68
N. elliptica Cleve	A-12: 85
	A-17: 52
	A-23: 69-93
N. entomon Ehrb.	 94-95
N. epithemia W. Sm.	 96
N. esax Ehrb.	 97-99
N. evederata	 100
N. excavata Grev.	A-24: 1

N. excavata Grev.	A-24: 2
var. angelorum Cleve	
N. fimbriata	A-1: 14
N. fischeri Schmidt.	A-24: 3
N. folderata Grun.	 4
N. follis Ehrb.	 5
N. formosa Greg.	 7-8
N. fossilis Ehrb.	A-24: 9-10
N. fusca Ralfs.	A-17: 48
	A-23: 31
N. gemmata Grev.	A-24: 11
var. spectabilis	
N. gentilis Donk.	 12
N. granulata Breb.	 13
N. gregaria Donk.	 14
N. hemiptera Kutz	 15-16
N. hennedyi W. Sm.	A-23: 14, 31
	A-24: 17-21
N. heroina Schmidt.	 22
N. humerosa Breb.	 23
N. indica Grev.	A-23: 31
N. inflexa Ralfs	A-12: 81
N. interposite Lewis	A-24: 24-25
N. interrupta Kutz	 26
N. iridis Ehrb.	 27
N. irrorata Grev.	A-23: 62
N. jamaicensis Grev.	A-24: 28
N. jennettii W. Sm.	 29
N. johnsonia Grev.	 30
N. kefvigensis Ehrb.	 31
N. kendallii Mask.	 32
N. kittoniana O'M.	A-23: 28, 62
N. lata Breb.	A-24: 33-36
N. latissima Greg.	 37
N. lewisiana Grev.	 38-41
N. liber W. Sm.	 42
N. liber W. Sm.	 43
var. maxima	
N. limosa Kutz.	A-24: 44-45
N. longa Greg.	 46
N. luxuriosa Grun.	A-23: 31
	A-24: 47-48
N. lyra Ehrb.	A-11: 4-6
	A-24: 72
N. lyra Ehrb.	A-23: 28
var. abmpra,os A.S.A.	
N. lyra Ehrb.	 14
var. elliptica Schmidt.	
N. lyra Ehrb.	A-24: 73
var. intermedia Perag.	
N. lyra Ehrb.	 74
var. recta Grev.	
N. lyra Ehrb.	 75
var. signata Schmidt	
N. lyra Ehrb.	A-23: 28
var. subcarinata Grun.	

N. maculata Bail.	A-24: 76-100
	A-25: 1-26
N. maculata Bail. var. major Heid.	 27-29
N. major Kutz.	A-23: 85
	A-25: 30-32
N. marginata Lewis	 33
N. marina Ralfs.	 34-35
N. maxima Grev.	 36
N. mesotyla Ehrb.	 37
N. minima Grun.	 38
N. multicostata Grun.	A-23: 14,44
	A-25: 39
N. neupaverii Pant.	A-25: 40
N. nobilis Ehrb.	 32, 41-45
N. notabilis Grev.	 46
N. numerosa	 47
N. oamaraensis Grun.	 48-49
N. oblonga Ehrb.	 50
N. oculata Breb.	 51
N. omula	 52
var. allas	
N. ornata A.S.A.	 53
N. ornata A.S.A.	 54
var. spirifera A.S.A.	
N. oswaldii Jans.	 55
N. pachyptera Ehrb.	 56
N. palpebralis Breb.	 57
N. pandura Breb.	 58
N. peregrina Ehrb.	 59-62
N. peripunctata Brun.	 63
N. permagna Edw.	A-23: 97-98
N. permagna Edw.	A-25: 64
var. esox	
N. perotettii Grun.	 65-66
N. phoenicenteron Ehrb.	 67
N. pirina	 68
var. latissima Ehrb.	
N. polysticta Grev.	A-24: 6
N. powellii Lewis	 67
	A-25: 69
N. praestes A.S.A.	A-23: 14
N. praetexta Ehrb.	 28
	A-25: 70-90
N. probabilis Schmidt.	A-24: 6
N. quadrata Greg.	A-25: 91-92
N. quarnerensis Grun.	 93
N. quinquenodis Grun.	 94
N. recta Brun. & Herib.	 95-100
	A-26: 1-9
N. rectangulata Greb.	 10-11
N. rhombica Greg.	 12-13
N. rhomboides Ehrb.	A-4: 26
	A-18: 71
	A-25: 32
	A-26: 14-31

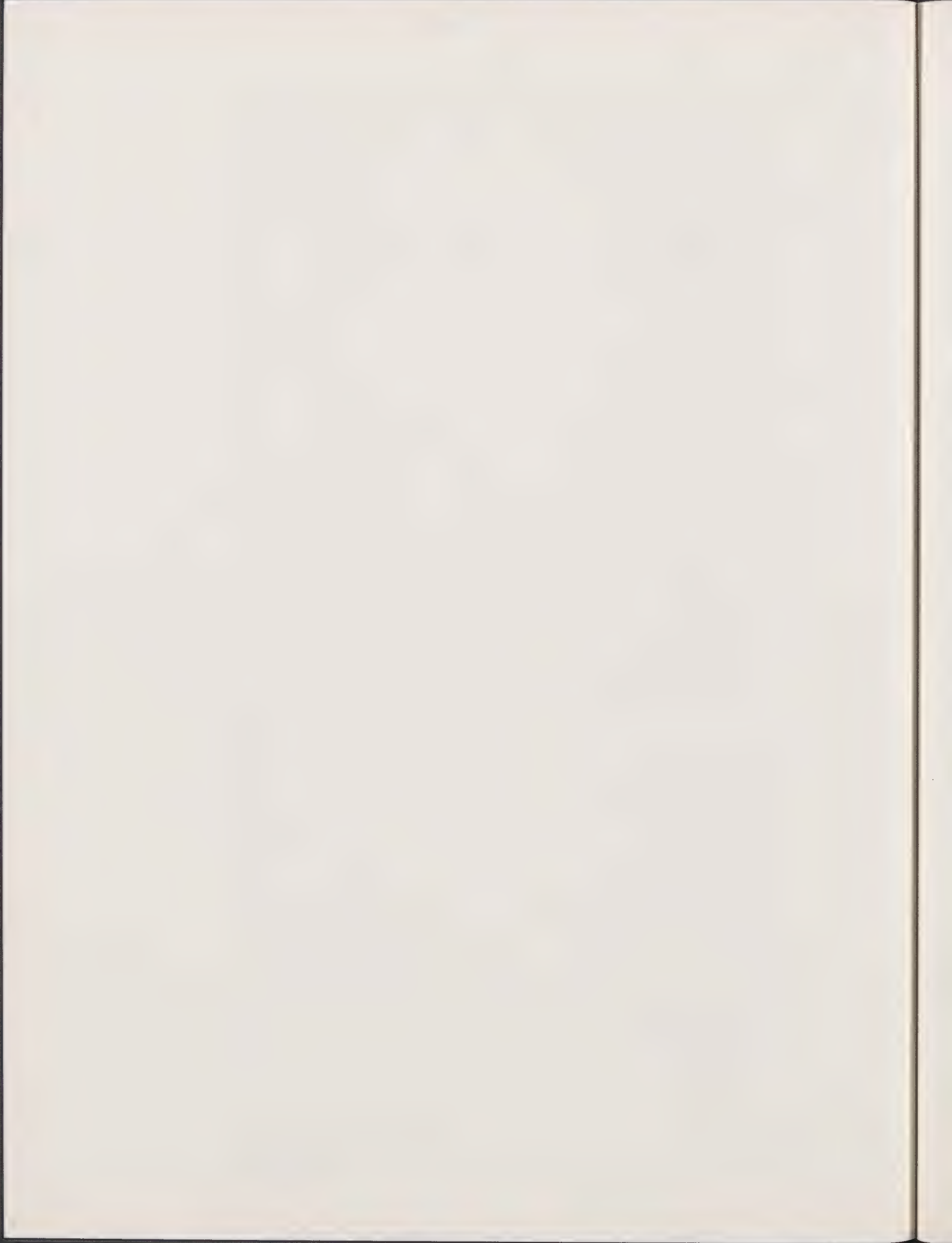
N. rhomboides Ehrb.	A-26: 32
var. amphipharoides Grun.	
N. rimosa Grev.	A-25: 72
N. robertsoniana Grev.	A-23: 62
N. robusta	A-26: 33-35
N. rostrata Ehrb.	A-11: 28, 31
N. salimarum Grun.	A-26: 36
N. sarrensis Grun.	 37
N. schultzeri Kain	 38-39
N. scopulorum Breb.	 40
N. sculpta Ehrb.	A-24: 9
	A-26: 41
N. scutelloides W. Sm.	 42
N. serians Breb.	A-25: 32
	A-26: 43
N. serratula Grun.	 44
N. sillimanorum Ehrb.	 45
N. slesvicensis Grun.	 46
N. smithii Breb.	 47-49
N. spectabilis Grun.	A-23: 14
	A-26: 50-63
N. splendida Greg.	A-23: 14, 28
	A-26: 64
N. strangulata Grev.	A-26: 65-66
N. suborbicularis Greg.	 67
N. subsalina Donk.	 68-69
N. subtilis Ralfs	 70-71
N. suecita Ehrb.	 72
N. trevelyana Donk.	 73
N. trinodis Ehrb.	 74-76
N. tumescens Wolle	A-3: 67
	A-23: 61
	A-26: 77-78
N. tuscula Ehrb.	 79
N. vagebunda Burn.	 80
N. variolata Cleve	 81-82
N. viridis Ehrb.	A-25: 32
	A-26: 83-84
N. yarrensis Grun.	 85
N. zanzibarica Grev.	 86
N. zanzibarica Grev.	 87
var. zebuana Cast.	
N. zosteretti Grun.	A-11: 29

124. Neidium

N. amphigomphus Pfitz.	A-26: 88
N. irides Pfitz.	 89
N. peregrina	 90
N. producta Pfitz.	 91
N. tumesens Grun.	 92-99

125. Nitzschia

N. sp.	A-26: 100
	A-27: 1-4



N. acuminata Grun.	A-27: 5
N. acuta Cleve	 6
N. alata Fort.	 7
N. <u>amphioxys</u> W. Sm. orig.	 42
N. angularis W. Sm.	 8
N. asiatica Temp. & Brun.	 9
N. brightwellia Kitt.	 10
N. circumsuta Grun.	 11-17
N. compressa Boyer	 18-19
N. curvula W. Sm.	 20-22
N. fasciculata Grun.	 23
N. formica Hantz.	 24-25
N. graeffii Grun.	 26-27
N. grandis Kitt.	 28-30
N. granulata Grun.	 31
N. grundlerii Grun.	 32
N. hungarica Grun.	 33-34
N. jelineckii Grun.	 6
N. lata Witt.	 35
N. longissima Grun.	 26
N. minuta Bleich.	 36
N. obtusa W. Sm.	 37
N. obtusa W. Sm.	 38-39
var. scalpelliformis Grun.	
N. palea Kutz.	 40
N. panduriformis Greg.	 41
N. petitiana Grun.	 42
N. plana W. Sm.	 43-46
N. pulcherrima Grun.	 47
N. quarnerensis Grun.	 26
N. scalaris W. Sm.	 48-53
N. scalpelliformis Grun.	 54
N. sigma W. Sm.	 55-56
N. sigmoidea W. Sm.	 57-58
N. sigmoidea W. Sm.	 59
var. undulata Petit.	
N. spectabilis Ralfs	 60-61
N. taenia W. Sm.	 62
N. tenuis W. Sm.	A-23: 5
N. terryi	A-27: 63
N. thermalis Ehrb.	 64
N. tryblionella Hantz.	 65-66
N. tryblionella Hantz.	 67
var. maxima Grun.	
N. valida Cleve	 68
N. vermicularis Hantz.	 69
N. vitrea Norm.	 70
N. weisflogii Cleve	 71

126. Odontidium

O. sp.	A-18: 57
	A-19: 74
	A-27: 72-81
O. baldjickii Brightw.	 82
O. hyemale Kutz.	 83-85

	<i>O. mesodon</i> Kutz.	A-27: 86-87
127.	<i>Odontodiscus</i>	
	<i>O. excentricus</i> Ehrb.	 88
	<i>O. subtilis</i> Grun	 89
128.	<i>Odontotropsis</i>	
	<i>O. corinata</i>	 90
129.	<i>Okedenia</i>	
	<i>O. inflexa</i> Eul.	 91
130.	<i>Omphalopelta</i>	
	<i>O. cellulosa</i> Ehrb.	 92
	<i>O. moroninis</i> Grev.	A-7: 81
	<i>O. versicolor</i> Ehrb.	A-27: 93
131.	<i>Opephora</i>	
	<i>O. schwartzii</i> Petit.	 94
132.	<i>Orthoneis</i>	
	<i>O. barbadensis</i> Grev.	 95
	<i>O. fimbriata</i> Grun.	 96
	<i>O. splendida</i> Grun.	 97-100
		A-28: 1-4
133.	<i>Orthosira</i>	
	<i>O. arenaria</i> W. Sm.	 5
	<i>O. punctata</i> W. Sm.	A-15: 87
		A-28: 6
	<i>O. solida</i> Ehrb.	7
134.	<i>Oscillaria</i>	
	<i>O. elliptica</i>	 8
135.	<i>Palmeria</i>	
	<i>P. sp.</i>	 9
136.	<i>Peponia</i>	
	<i>P. barbadensis</i> Grev.	 10
137.	<i>Peristephania</i>	
	<i>P. baileyii</i> Ehrb.	 11
	<i>P. eutycha</i> Ehrb.	 12-13

138. *Perrya*

- P. pulcherrima* Kitt.A-27: 47
 A-28: 14-15

139. *Pinnularia*

- P. sp.*A-26: 34
 A-28: 16-36
- P. aestuarii* Cleve 37
- P. alpina* W. Sm. 38-39
- P. cardinalis* Ehrb. 40-42
- P. clactylus* Ehrb. 43-56
- P. formica* Ehrb. 57
- P. gentilis* Cleve 58-59
- P. inaequalis* Ehrb.A-20: 88
- P. lata* Breb.A-28: 39, 60-69
- P. latevittata* Cleve 70
- P. legumen* Ehrb. 71
- P. major* Cleve 39, 46-47, 61
 72-80
- P. major* Cleve 81
- var. asymmetrica*
- P. major* Cleve 82
- var. turgidula* Cleve
- P. mesotula* Ehrb.A-21: 25
- P. nobilis* Ehrb.A-28: 75-78, 83-92
- P. oblonga* Rab. 93-95
- P. polyonca* Breb. 96
- P. synedia* 97
- P. trigonocephala* Cleve 98
- P. viridis* Ehrb. 39, 61, 99

140. *Plagiodiscus*

- P. martensianus* Grun. 100
- P. nervatus* Grun.A-29: 1

141. *Plagiogramma*

- P. sp.* 2
- P. decussatum* Grev. orig. 1
- P. elongatum* Grev. 3
- P. gregorianum* Grev. 4
- P. hardmanianum* Hab. & Chase 5
- P. nankooorenses* Grun.A-28: 100
- A-29: 7
- P. obesum* Grev. 8
- P. ornatum* Grev. 9
- P. pulchellum* Grev. 10
- P. tessellatum* Grev. 11
- P. validum* Grev. 12-13

142. *Pleurodesmium*

P. brebissonii Kutz.A-29: 14

143. *Pleurosigma*

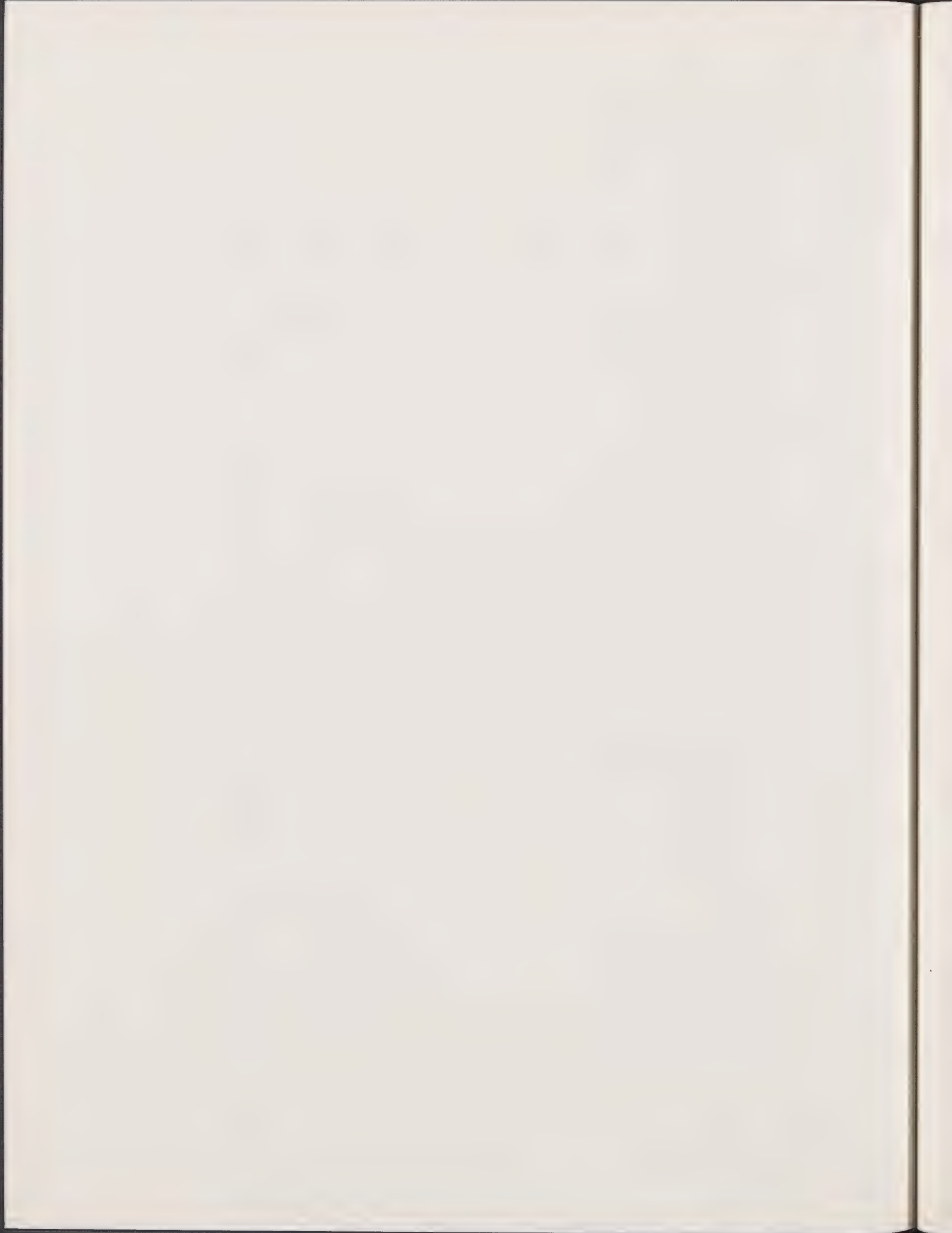
P. sp. 15-44
P. acuminatum Grun. 45-49
P. affine Grun. 50-51
P. affine Grun. 52
 var. fossilis Grun.
P. americanum Boyer 53-70
P. angulatum W. Sm. 71-77
P. attenuatum W. Sm. 78-81
P. baileyi Grun. 82
P. balticum W. Sm. 83-87
P. convexum Grun.A-29: 88
P. curvulum Grun. 89
P. decorum W. Sm. 90
 var. delicatulum W. Sm.
P. elongatum W. Sm. 66, 92-96
P. elongatum W. Sm. 97-98
 var. gracilis Grun.
P. estuarii 99
P. fasciola W. Sm. 100
P. formosum W. Sm.A-30: 1-3
P. formosum W. Sm. 4
 var. longissima Grun.
P. grundlerii Grun. 5-6
P. hippocampus W. Sm. 7-9
P. kutzingii Grun. 10
P. latorale W. Sm. 11
P. naviculaceum Breb. 12
P. olympianum Terry 13-17
P. pulchrum Grun. 18
P. rigidum W. Sm.A-13: 84
P. samonenseA-30: 19
 20
P. simile Grun.A-20: 71
P. sinense Grun.A-30: 21
 22
P. spectabile Grun.A-23: 50
P. spencerii W. Sm.A-30: 23
 24-25
P. strigilis W. Sm. 26-27
P. strigosum W. Sm.A-25: 23-25
P. terryanum Per.A-30: 28-37
 A-19: 79
P. virginicum H. L. Sm.A-30: 8-9
P. wansbeckei Donk.

144. *Pleurostaurum*

P. sp. 38
P. acutum Rab. 39
P. fulmen Grun. 40-42
P. frauenfeldianum Grun. 43

	<i>P. javanicum</i> Grun. orig.	A-30: 44-45
145.	<i>Ploiaria</i>	
	<i>P. petasiformis</i> Pont.	
146.	<i>Podocystis</i>	
	<i>P. adriatica</i> Kutz.	 47
	<i>P. americana</i> Bail.	 48-49
147.	<i>Podosira</i>	
	<i>P. argus</i> Grun.	 50
	<i>P. corolla</i> Burn.	 51-53
	<i>P. maculata</i> W. Sm.	 54
	<i>P. montagnei</i> Kutz.	A-20: 89
	<i>P. nummuloides</i> Ehrb.	A-30: 55
148.	<i>Podosphenia</i>	
	<i>P. angustata</i> Grun.	 56
	<i>P. ovata</i> W. Sm.	 56
	<i>P. pappeana</i> Grun.	 57
149.	<i>Poeconeis</i>	
	<i>P. scutillium</i>	A-10: 47
150.	<i>Polymyxus</i>	.....
	<i>P. coronalis</i> Bail.	A-30: 58-60
	<i>P. joynsoni</i> Hab.	 61
151.	<i>Porodiscus</i>	
	<i>P. calyciflos</i> Temp. & Brun.	 62
	<i>P. elegans</i> Grev.	 63
	<i>P. hirsutus</i> Gr. & St.	 64-67
	<i>P. nitidus</i> Grev.	 68
	var. <i>armata</i> Rutt.	
	<i>P. oblongus</i> Grev.	 69
	<i>P. ovalis</i> Grev.	 63, 70-71
	<i>P. splendidus</i> Grev.	 72
152.	<i>Porpeia</i>	
	<i>P. quadrata</i> Grev.	 73-74
	<i>P. quadriceps</i> Bail.	 75-77
153.	<i>Pseudo-auliscus</i>	
	<i>P. radiatus</i> Ratt.	 78-80
	<i>P. spinosus</i> Ratt.	 81

154. *Pseudostictodiscus*
- P. angulatus* Grun.A-30: 82
155. *Pyrgodiscus*
- P. sp.* 62
- P. armatus* 83
156. *Pyxidicula*
- P. actinocyclus* Ehrb.A-19: 79
- P. compressa* Bail.A-30: 84
- P. cruciata* Ehrb. 85-86
- P. limbata* Ehrb. 87
157. *Pyxilla*
- P. americana* Grun. 88
- P. baltica* Grun. 89
- P. caput-avis* Brun 90
- P. kittoniana* Grun. 91
158. *Raphidodiscus*
- R. sp.*A-30: 90
159. *Rhaphoneis*
- R. ampiceros* Ehrb.A-3: 59
-A-30: 93
- R. belgica* v. H. Sm.A-10: 26
- var. *intermedia* Grun.
- R. castracanei* Grun. 95-96
- R. liburnica* Grun. 97
- R. nodulifer* 98
- R. surirella* Grun. 99
160. *Rhabdonema*
- R. sp.*A-8: 23
-A-30: 100
- R. adriaticum* Kutz.A-31: 1-8
- R. arcuatum* Kutz. 9-12
- R. crozerii* Ralfs 13-15
- R. formosum* Brun 16
- R. japonicum* Temp. & Brun 17-18
- R. minutum* Kutz. 19
- R. mirificum* W. Sm. 20-21
- R. torrelli* Cleve 22
161. *Rhizonotia*
- R. melo* Ehrb. 23



162. Rhizosolenia

R. americana Ehrb.	A-19:	79
R. barbatum Ehrb.	.....	79
R. <u>erianis</u> H. L. Sm. orig.	A-31:	24
R. gigantea	A-28:	9
R. hebetata Lewis	A-31:	25
R. robusta Norm.	.....	26-28
R. shrubsolii Cleve	.....	29
R. striata Grev.	.....	30
R. styliformis Brightw.	.....	31

163. Rhoiconeis

R. garkeana Grun.	.....	32
	A-40:	98
R. genuflexa Grun.	A-31:	33

164. Rhoicosigma

R. antillarum Cleve	.....	34
R. compactum Per.	.....	35
R. oceanicum Per.	.....	36

165. Rhoicosphenia

R. <u>cuvata</u> Grun. orig.	.....	37-39
R. fracta Schmidt.	.....	40

166. Rhopalodia

R. gibba Mull.		41-41
----------------	-------	-------

167. Rutilaria

R. sp.	.....	43-44
R. elliptica Grev.	.....	45
R. epsilon Grev.	.....	46
R. hexagona Grun.	.....	47-50
R. longicornis Temp. Brun	.....	51
R. minimas	A-12:	40
R. pulchra Schmidt	A-31:	50
R. radiata Gr. & St.	.....	52-55
R. ventricosa Grev.	.....	56

168. Rylandsia

R. biradiata Grev.		57-59
--------------------	-------	-------

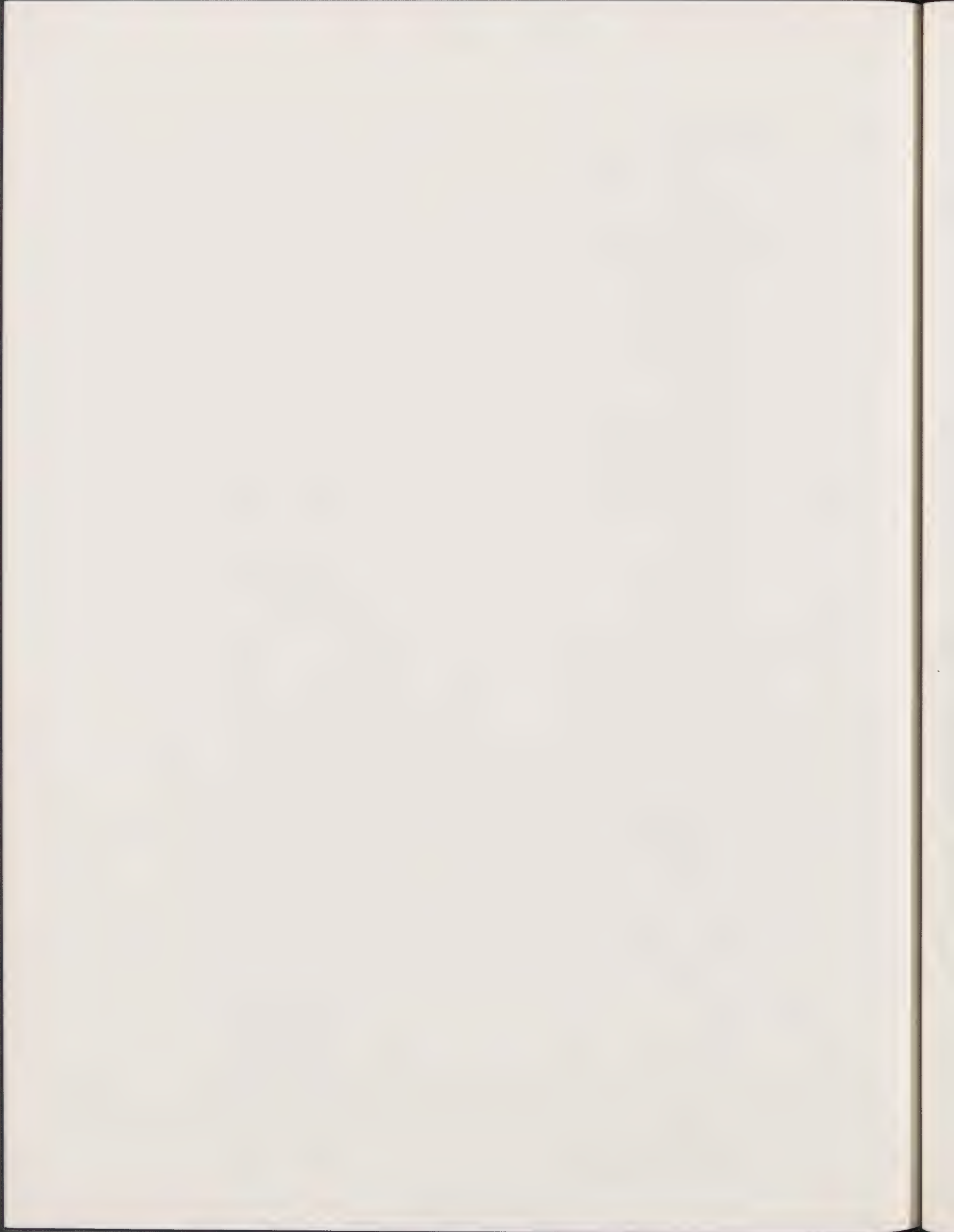
169. Scepтрoneis

S. caducens Ehrb.	.....	60-62
S. gemmata Grun.	A-15:	4

176.	Stenopterobia		
	S. anceps Breb.	.....	61
177.	Stephanodiscus		
	S. aegyptiacus Ehrb.	.....	62
	S. niagarae Ehrb.	.....	A-22:18, 28 A-32:63-72
178.	Stephanogonia		
	S. danica Grun.	.....	73-76
179.	Stephanopyxis		
	S. appendiculata Ehrb.	.....	77
	S. appendiculata Ehrb. var. intermedia Grun.	.....	78
	S. barbadensis Grev.	.....	79
	S. corona Ehrb.	.....	80
	S. cristi-galli Temp. & Brun	.....	81
	S. grunowii Gr. & St.	.....	82
	S. permaginata Grove	.....	83
	S. superba Grun.	.....	A-32: 84
	S. valida Gr. & St.	.....	85-86
180.	Stictodesmis		
	S. australis Grun.	.....	87
	S. braziliensis	.....	88
181.	Stictodiscus		
	S. sp.	.....	89
	S. affine Cast	.....	90
	S. angulatus Grun.	.....	91-92
	S. buryanus Grun.	.....	93
	S. californicus Grev.	.....	A-7: 81 A-32: 94-100 A-33: 1-8
	S. eulensteinii Cast	.....	9
	S. grevilleanus Walk. & Chase	.....	10-11
	S. grovei Schmidt	.....	12-13
	S. hardmanianus Grev.	.....	14
	S. kittonianus Grev.	.....	15-16
	S. manillensis	.....	17
	S. nitidus Gr. & St.	.....	18-19
	S. novae zelandiae Grun.	.....	20
	S. novae zelandiae Grun. f. pentagon	.....	21
	S. parallelus Gr. & St.	.....	22
	S. parallelus Gr. & St. var. gibbosa Gr. & St.	.....	23

182.	Stoschia		
	<i>S. admirabilis</i> Jans.	.....	24-25
183.	Striatella		
	<i>S. unipunctata</i> Agardh	.....	26
184.	Surirella		
	<i>S. sp.</i>	.....	A-7: 81
			A-11:16
			A-28:18
			A-31:82-83
			A-33:27-100
			A-34:1-2
	<i>S. americana</i> Terry	.....	23
	<i>S. amphioxys</i> W. Sm.	.....	24
	<i>S. apiae</i> Witt.	.....	25
	<i>S. arabica</i> Grun.	.....	26
	<i>S. arctissima</i> Schmidt	.....	27-28
	<i>S. bifrons</i> Kutz.	.....	29-30
	<i>S. biseriata</i> W. Sm.	.....	31-34
	<i>S. biseriata</i> W. Sm.	.....	35
	<i>var. linearis</i> W. Sm.		
	<i>S. brightwellii</i> W. Sm.	.....	36
	<i>S. capronii</i> Kitt.	.....	30
	<i>S. cardinalis</i> Kitt.	.....	37-51
	<i>S. circumsuta</i> Bail.	.....	52
	<i>S. clementis</i> Grun.	.....	59
	<i>S. constricta</i> Ehrb.	.....	53-55
	<i>S. contorta</i> Kitt.	.....	56-57
	<i>S. cornis</i>	.....	58
	<i>S. craticula</i> Ehrb.	.....	A-15:73
	<i>S. crumena</i> Breb.	.....	A-34:60-62
	<i>S. davidsonii</i> Schmidt.	.....	A-24:22
	<i>S. decora</i> Ehrb.	.....	A-34:63
	<i>S. deflexa</i> Schmidt	.....	64
	<i>S. diaclema</i> Ehrb.	.....	65-66
	<i>S. elegans</i> Ehrb.	.....	67-97
	<i>S. elliptica</i> Terry	.....	98-100
			A-35:1-2
	<i>S. fastuosa</i> Ehrb.	.....	A-35:3-40
	<i>S. fastuosa</i> Ehrb.	.....	41
	<i>var. opulenta</i> Grun.		
	<i>S. febigerii</i> Lewis	.....	A-24:41
			A-35:42-46
	<i>S. gemma</i> Ehrb.	.....	47-53
	<i>S. grandis</i>	.....	54
	<i>S. guatemalensis</i> Ehrb.	.....	A-34:51
			A-35:55
	<i>S. hastata</i> Schmidt	.....	56-66
	<i>S. kerguelensis</i> Jans.	.....	67
	<i>S. lata</i> W. Sm.	.....	68
	<i>var. fastuosa</i>		

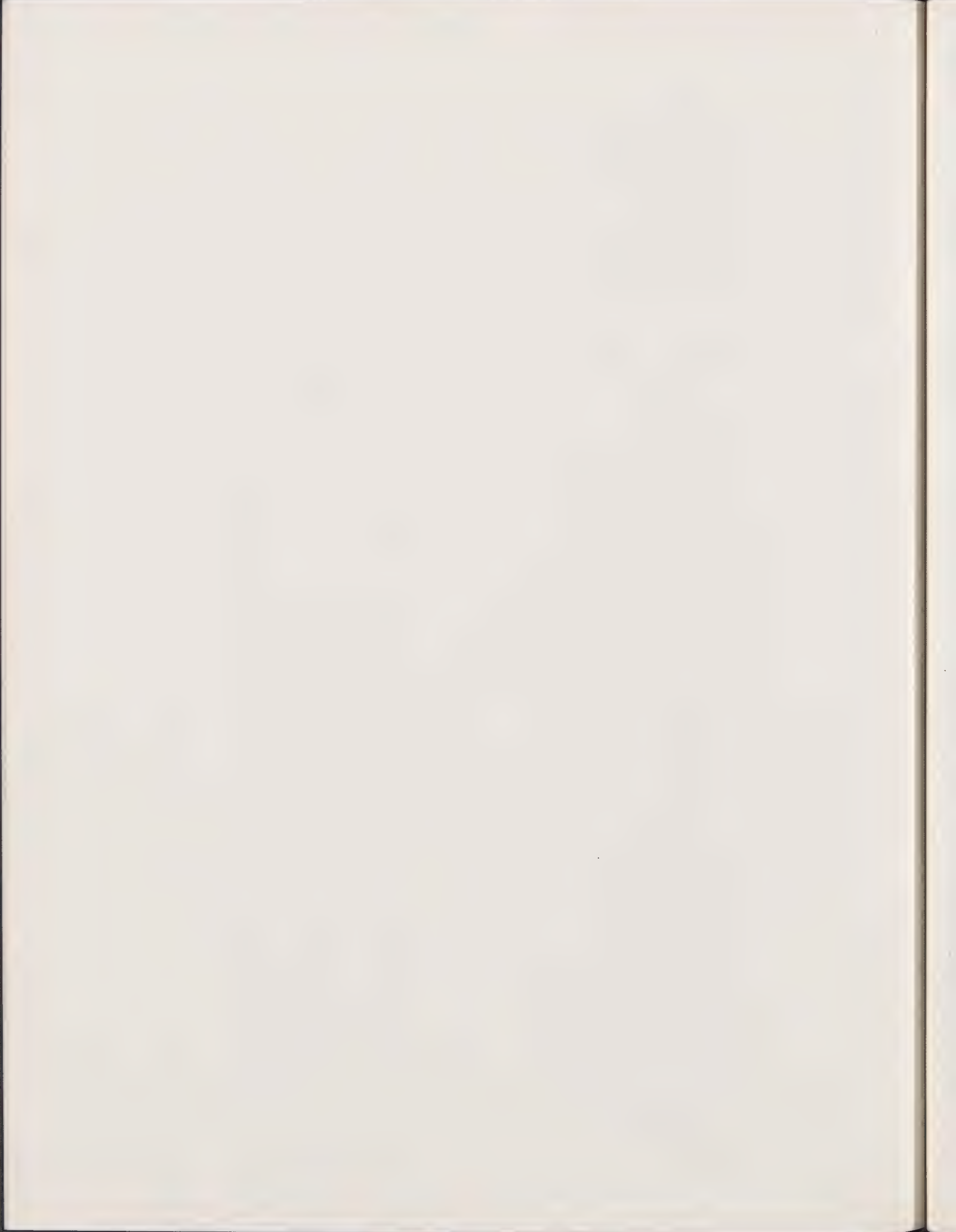
<i>S. limosa</i> Ehrb.	A-34: 51
	A-35: 69-70
<i>S. lorenziana</i> Grun.	A-34: 25
<i>S. microcora</i> Ehrb.	A-35: 71
<i>S. molleriana</i> Grun.	 74
<i>S. nobilis</i> W. Sm.	 75
<i>S. norwegica</i> Ehrb.	 76
<i>S. oblonga</i> Ehrb.	 81-84
<i>S. ovalis</i> Breb.	 85
<i>S. ovata</i> Kutz.	A-36: 2
<i>S. panduriformis</i> Rab.	A-35: 77
<i>S. patella</i> Ehrb.	 86-97
<i>S. patens</i> Witt.	 88
<i>S. pinnata</i> W. Sm.	 78
<i>S. pulchra</i> Lewis	 89
<i>S. pyreiformis</i> Kitt.	 79
<i>S. radiata</i> Grun.	A-35: 90
<i>S. recedens</i> Schmidt	 91-92
<i>S. regina</i> Jans.	 93
<i>S. reniformis</i> Grun.	A-28: 100
	A-35: 94-95
<i>S. rhipis</i>	 96
<i>S. robusta</i> Ehrb.	A-12: 21
	A-34: 97
	A-35: 97-100
	A-36: 1
<i>S. salina</i> W. Sm.	 2
<i>S. slevicensis</i>	 3
<i>S. spiralis</i> Kutz.	 4-6
<i>S. splendens</i> Tol.	 7-8
<i>S. splendida</i> Ehrb.	 9-12
<i>S. striatula</i> Turp.	A-3: 46
	A-30: 2
	A-34: 97
	A-36: 13-55
<i>S. subsala</i> W. Sm.	A-35: 71
<i>S. superba</i> Grev.	A-36: 56
<i>S. tenera</i> Greg.	 57-61
<i>S. terryana</i> Ward.	 62
<i>S. terryi</i> Ward. n. sp.	 63-65
185. <i>Symbolophora</i>	
<i>S. trinitatis</i> Ehrb.	 66
186. <i>Synedra</i>	
<i>S. sp.</i>	A-16: 90
	A-23: 86
	A-36: 67-70
<i>S. aequalis</i> Kutz.	 93
<i>S. affinis</i> Kutz.	 71-72
<i>S. arcus</i> Kutz.	 73
<i>S. biceps</i> Kutz. orig.	A-36: 74
<i>S. capitata</i> Ehrb.	 75



<i>S. chasei</i> Thomas	.....	76-78
<i>S. crotonensis</i> Grun.	.....	79
<i>S. crystallina</i> Kutz.	.....	80
var. <i>smithii</i> Grun.		
<i>S. danica</i> Kutz.	.....	81-82
<i>S. delicatissima</i> W. Sm.	.....	83
<i>S. flexuosa</i> Breb. orig.	.....	84
<i>S. formosa</i> Hant.	.....	85
<i>S. fulgens</i> Grev.	A-33:	26
	A-36:	86
<i>S. goulardii</i> Breb.	.....	87-89
<i>S. hennedyana</i> Greg.	.....	90
<i>S. laevigata</i> Grun.	.....	91
<i>S. obtusa</i> W. Sm.	.....	92-93
<i>S. pulchella</i> Kutz.	.....	94-95
<i>S. radians</i> W. Sm.	.....	96
<i>S. robusta</i> Prit.	.....	97
<i>S. salina</i> W. Sm.	.....	98
<i>S. smithii</i> Breb.	.....	99
<i>S. speotabilis</i> Ehrb.	A-36:	100
	A-37:	1-2
<i>S. tabulata</i> Kutz.	.....	3
<i>S. thalassiotrix</i> Cleve orig.	.....	4-5
<i>S. ulna</i> Ehrb.	.....	6-8
<i>S. undulata</i> Bail.	.....	9-11
<i>S. vancheriae</i> Kutz. orig.	.....	12
187. <i>Syringidium</i>		
<i>S. sp.</i>	A-15:	4
	A-37:	13
<i>S. daemon</i> Grev.	.....	14
<i>S. wittii</i> Grun.	.....	15
188. <i>Systephania</i>		
<i>S. aculeata</i> Ehrb.	.....	16
<i>S. corona</i> Ehrb.	.....	17-19
<i>S. diadema</i> Ehrb.	.....	20
189. <i>Tabellaria</i>		
<i>T. fenestrata</i> Kutz.	.....	21-24
190. <i>Terpsinoe</i>		
<i>T. americana</i> Bail.	A-1:	47
	A-37:	25-28
<i>T. inflata</i> Brun	.....	29-30
<i>T. musica</i> Ehrb.	.....	31-41
191. <i>Tetracyclus</i>		
<i>T. ellipticus</i> Grun.	.....	42
<i>T. lacustris</i> Ralfs	.....	43-44

192.	Thalassiosira	
	T. nordenskioldii Cleve	 45
193.	Toxarium	
	T. gregoriana Donk.	A-18: 40
	T. undulatum Bail.	A-37: 46
194.	Trachelomonas	
	T. aspera Ehrb.	 47
195.	Trachyneis	
	T. aspera Cleve	 48
196.	Triceratium	
	T. sp.	A-11: 4-8 A-37: 49-87
	T. alternans Bail.	A-37: 88-90
	T. americanum Ralfs	 91-93
	T. anastomosans Grove	 94
	T. antediluvianum Grun.	 96-97
	T. archangelskianum Witt.	 98
	T. arcticum Brightw.	A-5: 8-9 A-37: 99-100 A-38: 1-5
	T. arcticum Brightw.	A-10: 20
	var. californicum Grun.	A-38: 6
	T. arcticum Brightw.	 7
	var. californicum Grun.	
	f. tetragona	
	T. arcticum Brightw.	 8
	var. quadratum	
	T. arcticum Brightw.	 9-10
	v. quadrata	
	T. areolatum Grev	 11
	T. balaniferum Temp & Burn	 12
	T. bicornis Cleve	 13
	T. brachiatum Brightw.	 14-16
	T. brookei Lend-Fortm	 17
	T. bullatum Grove	 18
	T. bullosum Witt.	 19
	T. campechianum Grun.	A-27: 35 A-38: 20
	T. cancellatum Grev.	 21
	T. capitatum Grev.	 22-23
	T. castellatum West.	 24-26
	T. castelliiferum Grun.	 27-28
	T. cellulosum Grev.	 29-31
	T. cinnamomeum Grev.	 32
	T. consimile Greg.	 33-34
	T. corniferum	 35
	T. coscinoides Gr. & St.	 36

T. crenulatum Gr. & St.	.....	37-40
T. crenulatum Gr. & St.	.....	41
var. gibbosa		
T. cyclomen Brun	.....	42-48
T. davyanum Grev.	.....	49
T. dobreianum Grev.	.....	50-51
var. <u>Nova zealandica</u> Gr. & St.		
T. definitum Grev.	.....	52
T. disciforme Grev.	.....	53
T. distinctum Jans.	.....	54
T. dubium Brightw.	A-29: 1	
	A-38: 55	
T. elegans Grev.	.....	56-57
T. elongatum Grun.	.....	58
T. exornatum Grev.	A-38: 59	
T. favus Ehrb.	A-24: 66	
	A-38: 60-84	
T. favus Ehrb.	.....	85
var. sept-angulatum Kitt.		
T. fimbriatum Wall.	.....	86
T. formosum Brightw.	.....	87-89
T. fractum Walk & Chase	.....	90-91
T. gibbosum Bail.	.....	89
T. glandarium Schmidt	.....	92-93
T. grande Schmidt	.....	94-99
T. granulatum Walk & Chase	.....	100
T. gratiosum Grev.	A-39: 1	
T. <u>hardmanianum</u> Grev. orig.	.....	2-4
T. harrisonianum Norm.	.....	5-11
T. heibergii Grun.	.....	12
T. imperiatis Walk & Chase	.....	13
T. inelegans Grev.	.....	14-16
T. inflatum Grev.	.....	17
T. insigne Grev.	.....	18-20
T. intermedium Gr. & St.	.....	21
T. irregulare Grev.	.....	22
T. javanicum Cleve	.....	23-24
T. joynsonii	.....	25
T. junctum Schmidt	.....	26
T. kainii Schulf.	.....	27
T. kinkerianum Burn	.....	28-29
T. labyrinthæum Grev.	.....	31
T. lobatum Grev.	.....	32-33
T. major Gr. & St.	A-39: 34-37	
T. mammosum Grev.	.....	38
T. margaritaceum Ralfs	.....	39
T. marylandicum Brightw.	.....	40-41
T. megastomum Brightw.	.....	42
T. membranaceum Brightw.	.....	43
	A-40: 59	
T. microstictum Grev.	A-10: 83	
T. montereyii Brightw.	A-39: 44-45	
T. morlandii Gr. & St.	.....	46-49
T. muricatum Brun	.....	50



T. nitescens Grev.	A-39:	51-52
T. nobile Witt.	.....	53
T. nova zelandiae Gr. & St.	.....	54-57
T. oamaruense Gr. & St.	.....	58-60
T. obtusum Ehrb.	.....	61
T. orbiculatum Shadb.	A-38:	89
T. ornatum Grun.	A-39:	62
T. pantocsekii Schmidt	.....	63
T. parallelum Grev.	.....	64-67
T. pentacrinus Wall.	.....	68-70
T. pentacrinus Wall.	.....	71
f. quadrata Hust.		
T. pileolus Ehrb.	.....	72
f. major Grun.		
T. polygonium Grev.	.....	73
T. productum Grev.	.....	74-76
T. pseudo-nervatum Gr. & St.	.....	77
T. pulvinar Schmidt.	.....	78-79
T. punctatum Wall.	.....	80-81
T. quadrangulare Grev.	A-39:	82-84
T. quinquelobatum Grev.	.....	85-86
T. radiatum Grev.	.....	87-88
T. regina Ehrb.	.....	89
T. reticulum Ehrb.	A-1:	68-69
T. robertsonianum Grev.	A-39:	90
T. robustum Grev.	.....	91
T. rugosum Gr. & St.	.....	92-93
T. schmidtii Jans.	.....	94-97
T. scitulum Brightw.	.....	98-100
	A-40:	1
T. sculptum Shadb.	.....	2-3
T. secedens Schmidt	.....	4-14
T. semicirculare Brun	.....	15
T. sendaiense Schmidt	.....	16
T. sendaiense Schmidt	.....	17
var. quadrata Schmidt		
T. septangulatum W. Sm.	.....	18
T. serratum Wall.	.....	19
T. solenoceros Ehrb.	.....	20
T. spicatum	.....	21
T. spinosum Bail.	.....	22-23
T. spinosum Bail.	.....	24
var. ornata Gr. & St.		
T. stokesianum Grev.	.....	25
var. gravica		
T. striolatum Ehrb.	.....	26-27
T. subcapitatum Brightw.	.....	28-29
T. tabellarium Brightw.	.....	30-31
T. tridactylum Brightw.	.....	32
T. tripolare Temp. & Brun	A-40:	33
T. trisulcum Bail.	.....	34-35
T. trisulcum Bail.	.....	36
var. cuneata Schmidt		
T. truncatum Brightw.	.....	37
T. tumidum Grev.	.....	38
var. contulatum Grun.		

T. umbilicatum Ralfs	.....	39
T. undulatum Ehrb.	.....	40-41
T. undum Eul.	.....	42
T. validum Grun.	.....	43
T. venosum Brightw.	.....	44-50
T. venulosum Grev.	.....	51
T. venulosum Grev.	.....	52-54
var. major		
T. weissei Schmidt	.....	55
T. weissflagii Gr. & St.	.....	56
T. westianum Grev.	.....	57-58
T. membranaceum Brightw.	.....	59
197. Trinacria		
T. sp.	.....	60-62
T. excavata Heib.	.....	63-68
T. excavata Heib.	.....	69
var. producta		
T. heibergii Kitt.	.....	70-71
T. insipiens Witt.	.....	72
T. junctum Schmidt	.....	73-77
T. kittoniana Grun.	.....	71
T. regina Heib.	.....	78-79
T. ventricosa Gr. & St.	.....	80
T. wittii Schmidt	.....	81-82
198. Tropidoneis		
T. lepidoptera Cleve	A-40:	83
T. seriata Cleve	.....	84
T. zebra Cleve	.....	85
199. Tryblionella		
T. acuminata W. Sm.	.....	86-87
T. hantzschiana Grun.	.....	88
T. novae hollandia Grun.	.....	89
T. punctata W. Sm.	.....	90
T. scatellum W. Sm.	.....	91-92
T. victoriae Grun.	.....	93-94
200. Xanthiopyxis		
X. constricta Ehrb.	.....	95
X. oblonga Ehrb.	.....	96
X. umbonata Grev.	.....	97
groups of species	A-41:	1-7

Index B

I. United States

1. Alabama	.....	B-1:	1-100
		B-2:	1-26
2. Arizona	.....		27-35
3. California	.....		36-100
	.....	B-3:	1-100
	.....	B-4:	1-100
	.....	B-5:	1-10
4. Colorado	.....		11-12
5. Connecticut	.....		13-100
	.....	B-6:	1-100
	.....	B-7:	1-100
	.....	B-8:	1-100
	.....	B-9:	1-100
	.....	B-10:	1-100
	.....	B-11:	1-100
	.....	B-12:	1-34
	.....	B-34:	22-100
	.....	B-35:	1-100
	.....	B-36:	1-55
6. Florida	.....	B-12:	35-88
7. Georgia	.....		89-100
	.....	B-13:	1-5
8. Hawaii	.....		6-32
9. Idaho	.....		33-34
10. Illinois	.....		35-38
11. Indiana	.....		39-100
	.....	B-14:	1-16
12. Lake Erie	.....		17-18
13. Lake Superior	.....		19
14. Louisiana	.....		20
15. Maine	.....		21-100
	.....	B-15:	1-3
16. Maryland	.....		4-72
17. Massachusetts	.....		73-100
	.....	B-16:	1-100
	.....	B-17:	1-100
	.....	B-18:	1-6
18. Minnesota	.....		7
19. Mississippi	.....		8-9
20. Missouri	.....		10-11
21. Montana	.....		12
22. Nebraska	.....		13-14
23. New Hampshire	.....		15-72
24. New Jersey	.....		73-100
	.....	B-19:	1-100
	.....	B-20:	1-100
	.....	B-21:	1-14

25. New York	15-84
26. North Carolina	85-96
27. Ohio	97-98
28. Oregon	99-100
.....	B-22: 1-21
29. Pennsylvania	22-49
30. Rhode Island	50-93
31. Rocky Mountains	94
32. South Carolina	95-100
.....	B-23: 1
33. Utah	2-6
34. Vermont	7-19
35. Virginia	20-98
36. Washington	B-23: 99-100
.....	B-24: 1-100
.....	B-25: 1-100
.....	B-26: 1-4
37. Wisconsin	5-6
38. Wyoming	7-23

II. World

A. Antarctica	B-27: 15
B. Africa	
1. Algeria	1-2
2. Canary Islands	3-9
3. Madagascar	10-13
4. Nigeria	14
C. Asia and Indian Ocean	
1. China	16, 21
2. Hong Kong	17-19
3. Japan	20-84
4. Java	85-96
5. India	97-100
.....	B-28: 1-5
6. Kerguelen Island	6-7
7. Mauritius	8
8. Nepal	9-19
9. Northeast Asia	20
10. Turkey	22
D. Australia and South Pacific	
1. Australia	B-28: 23-36
2. New Zealand	B-28: 37-100
.....	B-29: 1-39
3. Pacific Ocean	40-41
4. Samoa Islands	42-48

E. Europe

1. Adriatic Sea	B-32: 66-71
2. Austria	49
3. Azores	50-52
4. Bohemia	53-59
5. Czechoslovakia	60-74
6. Denmark	75-100
7. England	B-30: 1-58
8. Finland	59-67
9. France	68-69
10. Germany	70-91
11. Greenland	95-100
12. Holland	B-31: 1-36, 43-49
13. Hungary	B-30: 92-94
14. Ireland	B-31: 50
15. Italy	51-72
16. Lapland	73-79
17. Mediterranean Sea	80-88
18. North Sea	89
19. Norway	90-91
20. Russia	92-96
21. Scotland	97-100
22. Spain	B-32: 1
23. Spitzenberg	2-12
24. Sweden	B-31: 37-42
25. Wales	B-32: 13-36
	B-32: 37-40
	41-43
	44-65
	72-75

North and Central America (not including U.S.)

1. Atlantic Ocean	76
2. Bering Sea	B-33: 6
3. Canada	14-47
4. Costa Rica	95-98
5. Gulf of Mexico	50-52
6. Honduras	99-100
7. Mexico	58-75
8. Panama	B-34: 1-2

South America

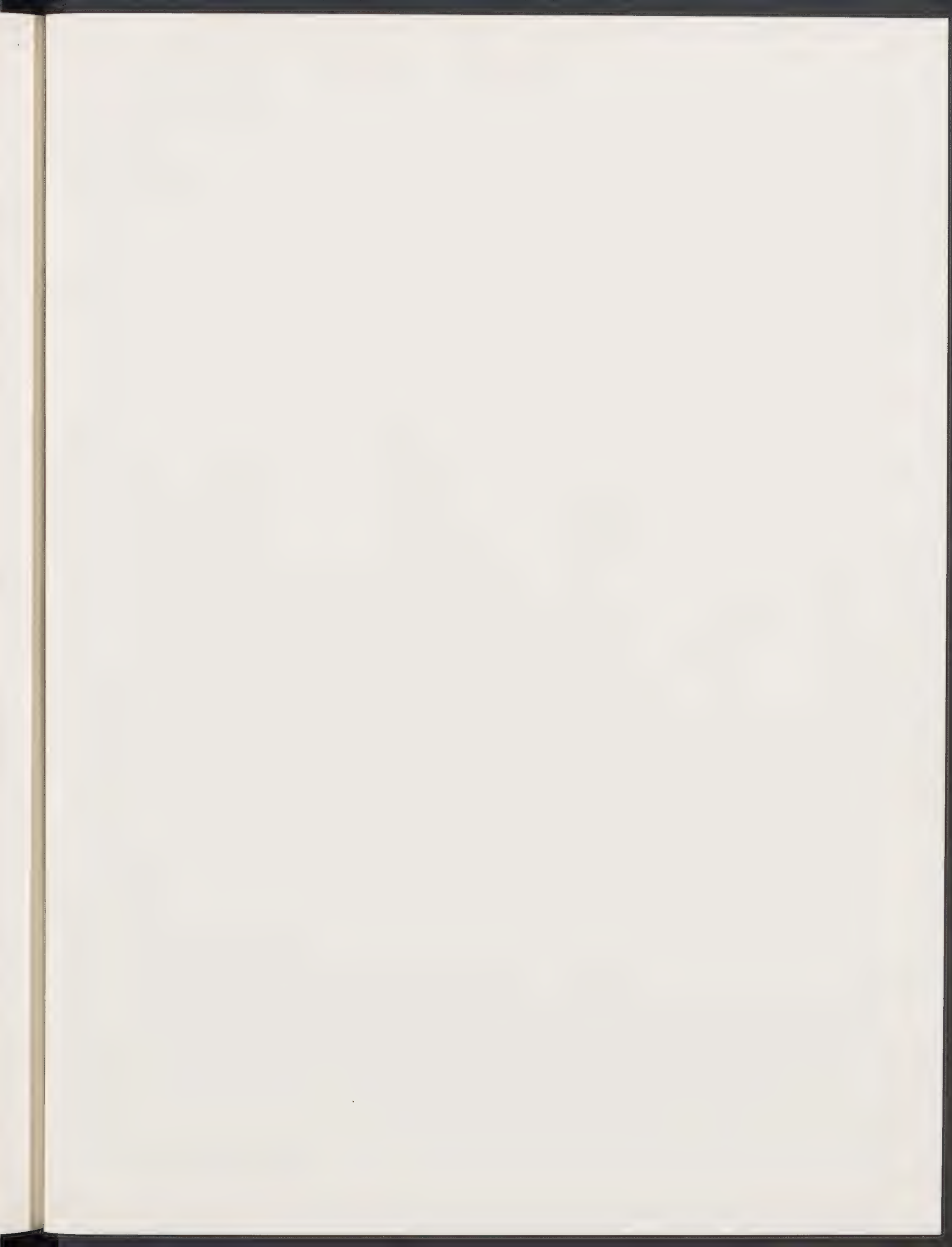
1. South America	B-33: 80-81
2. Argentina	82-83
3. Bolivia	84
4. Brazil	85-89
5. Chile	90-94
6. Peru	B-34: 3-7

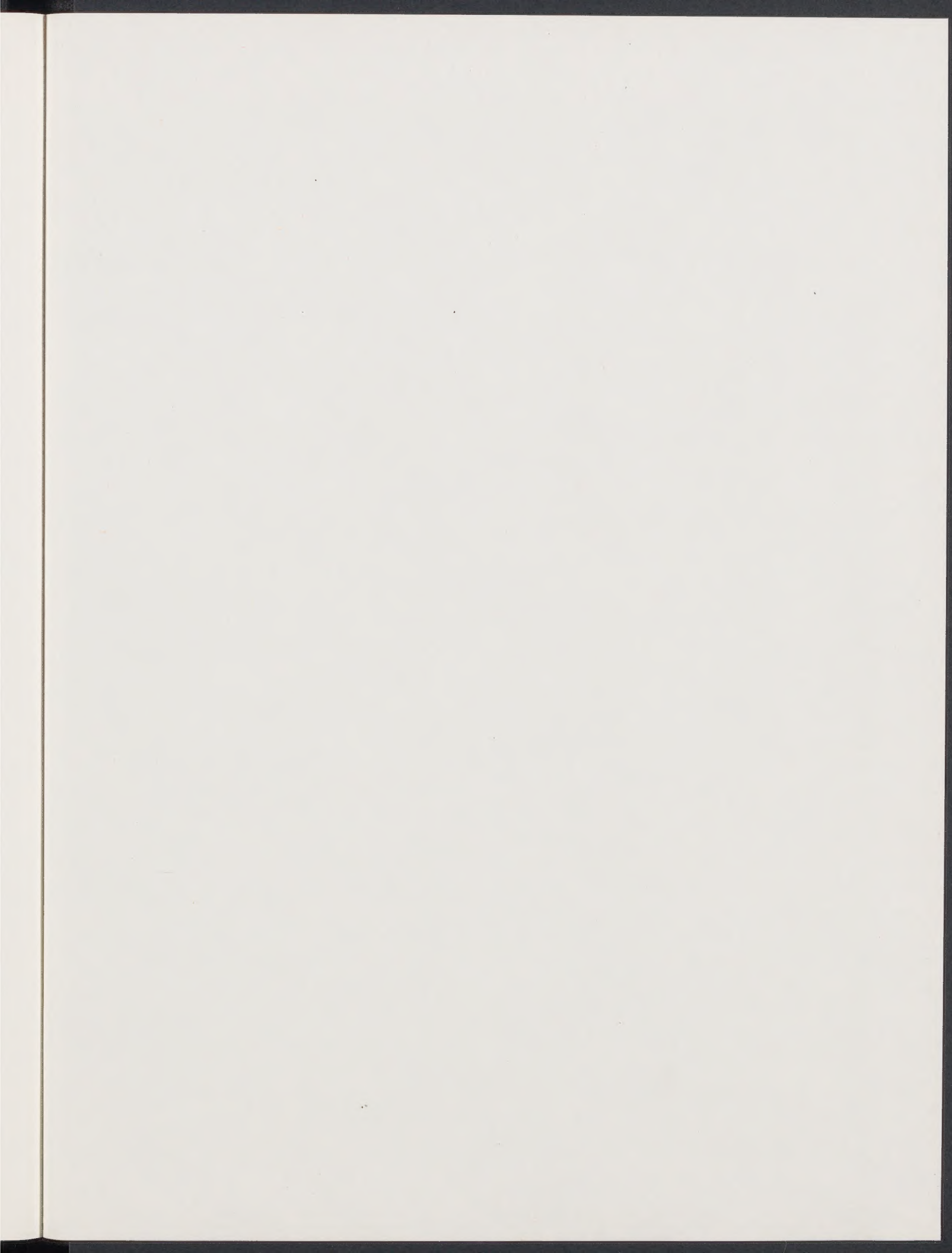
West Indies

1. Barbados	.....	B-32: 77-100
	.....	B-33: 1-5
2. Bermuda	.....	7-13
3. Cuba	.....	48
4. Guadeloupe	.....	49
5. Haiti	.....	53-54
6. Jamaica	.....	55-56
7. Martinique	.....	57
8. Trinidad	.....	B-33: 75-79

Location by Longitude & Latitude

B--34: 8-12





Uma
Bookbinding Co., Inc.
200 Summer Street
Boston 10, Mass.

